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NEW COMPUTER EXPRESS

FIRST NEWS • FIRST REVIEWS • BEST BUYS • YOUR WEEKLY GUIDE

THIS WEEK

ATARI
The Stacy gets an upgrade while Atari ends up in court on a piracy charge

PCs
They're burning spreadsheets in America **Plus** Compaq's notebook sets the standard for speed

AMIGA
Games players held by Captive **Plus** a video about desktop video

ARCHIMEDES
RISC portable coming?

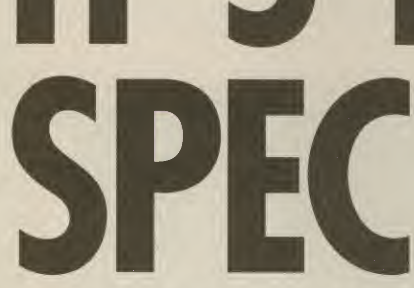
GAMES GALORE!

The fastest ever solution to Damocles, plus news of two extension disks to keep you going • Voodoo Nightmare on test • All the latest news, gossip, consoles, & charts...

IT'S THE SPECTRUM CONSOLE!

But it's not from Amstrad. We have EXCLUSIVE details on page 7

YOU AIN'T SEEN NOTHING LIKE IT



What if a spreadsheet used graphics instead of numbers? What if a database let you draw pictures? A different kind of program is reviewed on page 70

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The cheapest way to get a Macintosh is still to buy an emulator.
The latest Amiga device, AMax II, is on test inside

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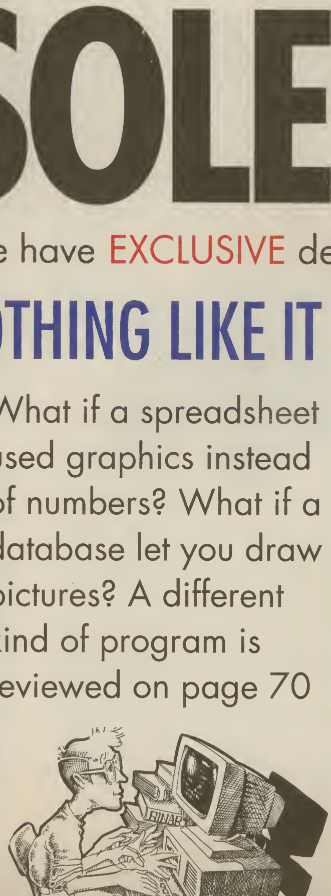

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PLUS
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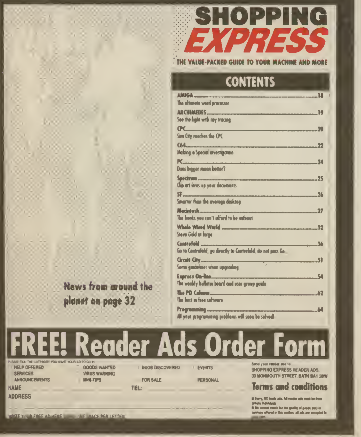

SHOPPING EXPRESS
THE VALUE-PACKED GUIDE TO YOUR MACHINE AND MORE

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frontend

edited by Colin Campbell

London fields PC guide

This is London. It's big, noisy, sleazy, mean, dirty and, more often than not, lots of fun.

Trouble is, it's got so much of everything that it's hard to know where to go. With this in mind, the highly influential magazine *Time Out* and Triangle Interactive Publications have joined forces to release a disk-based city guide for PC owners.

The Time Out London Guide 1991 is the first in a series which will eventually cover Paris, Frankfurt, Amsterdam and New York. You'll be able to glean information concerning accommodation, eating and drinking, children, health, shopping, nightlife, sightseeing, gay and lesbian venues, museums, students, transport and sports.

Triangle boss Peter Mackeonis enthused: "The disk guides are invaluable to business visitors, day trippers, tourists and even Londoners who want to know their city better. This is the first time PC owners can get London information on their own PC. There's no waiting around for directory enquiries or using a modem." ▩

First time classic

Who says computers are baffling for first time users? Apple, in a smart showing of public relations savvy, has given an east German school six of its new Classic machines.

None of the kids had ever seen a computer and only two from a class of 50 had ever heard of Apple Computers.

They were told to produce the school's first newspaper in 45 years on the machines. The children, all aged under 14, managed the feat in two days. ▩

Jailbird hacker robs just about everyone

A man has admitted running a large scale hacking and fraud operation – from a prison cell.

Convicted murderer Daniel Faries was sentenced to life last year, but from his cell in a Miami prison, he managed to hack into credit companies computer systems around the US. By using other people's credit numbers he sent hundreds of gifts to friends, relations and even prison warders.

Prezzies included jewellery, cases of champagne, food hampers, hired limousines, Rolex watches and even a set of diamond studded false teeth. Faries even managed to bribe warders by sending 24 of them a pair of snakeskin boots each.

He'd managed the scam by persuading a favourite warder to smuggle a portable PC into the prison. Then he built himself a modem and wired it into prison telephone lines hidden behind a metal plate in his cell.

He dialled out to a satellite dish by using an electronic watch. Apparently, the tones of the watch are similar to that of a telephone. This way he could roam around the international satellite communications system at will.

Faries' pals lived a life of luxury and he even continued the fraud after being transferred to a prison in Chicago. It was here, though, that scrupulous prison officers uncovered the crime.

But Faries, who faces five years for fraud, is asking the judge for a maximum sentence. He wants to get back into prison to "get started on a new scheme".

For more hacking news turn to page 8. ▩

Look, NESS monsters!

PC manufacturer NESS last week unveiled a new line up of machines ranging from an expandable entry level 286 to a heavy-duty 386 option.

All models can accommodate up to three 5.25-inch disk drives and one 3.5-inch drive and are supplied with two serial ports, one parallel port and feature switchable 0/1 wait states. Six 16-bit expansion slots and two 8-bit slots are available with the AT style desktops and tower while the 'slimline' machines come with four 16-bit and two 8-bit slots. The entry level 286 costs £770 and comes with 1Mb RAM, expandable to 8Mb on the motherboard. They run at switchable speeds of 8MHz and 16MHz.

Apart from the whizzy Intel chip, the 386 machines are much the same although they can be expanded to 16Mb and run at 20/25MHz. Prices start at a reasonable £1,210. Mono monitors are supplied as standard.

Call 081-452 8233. ▩

Mario's back

Mario is probably the most famous computer character in the world. In the US Nintendo mad kids munch Mario breakfast cereals, wear Mario baseball caps and, of course, they play Mario games. Mario has a place in 31 million American homes.

As such, Nintendo's introduction of a brand new Mario game is seen as something of a media event. Last week the Japanese mega-company unveiled *Dr Mario* for the Nintendo console and hand-held Gameboy.

The game combines all the bounce along fun of the original *Super Mario Brothers*, with just a hint of difference. In *Dr Mario* you have to deliver pills and potions as an antidote to a horrible virus.

Mario's creator Howard Phillips said. "He has that universally appealing element of fun that makes the games irresistible to both adults and children." ▩

Damocles word

PROF HANTZENS NEW ADDRESS IS UR CITY 07-01

DION
DAMOCLES
NOTE PAD
02-33-19

***Damocles* is a great game. It's a feast of curious three dimensional worlds and brain mashing puzzles designed to keep you hooked for months.**

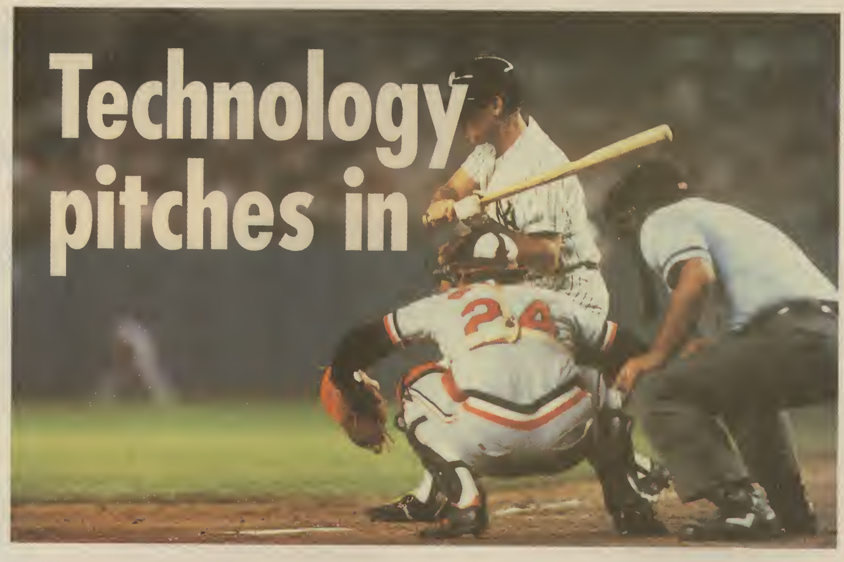
However, even the most dedicated *Damocles* adventurer is sure to solve things sooner or later, which is the reason for two mission disks from Novagen.

Each disk will feature five new space based missions – the original was a standard 'save the world from a very big comet' affair. But it's not just the objectives which are new. Author Paul Woakes says the mission disks will reveal new aspects of the basic gameplay.

***Damocles Mission I* is out this month with the second pencilled in for a January launch. They will both cost £9.99 on the ST and Amiga. Call distributor Active 081-752 1260.** ▩

● For a solution to *Damocles* turn to page 66.

Technology pitches in



Computers are in the firing line once again, but this time it's the want of technology which is coming in for some stick.

Top baseball team the Boston Red Sox are blaming their failure to win the crucial World Series on an inability to keep up with the times. The Red Sox were recently destroyed four nil by the Oakland Athletics in what amounts to the semi-final stage. Infielder Marty Barrett immediately blamed the team's inability to win anything on an ignorance of the advantages of computers.

He said: "Other teams put a lot of emphasis on computers. We're an old traditional organisation and for some reason, we don't want to get into computers. We ought to conform."

Baseball teams often use computers to decide which players are best for which role, in much the same fashion as a sports management game.

In baseball, anything and everything can screw up a result, apart from a losing team's inability to be any good.

Red Sox manager Lou Gorman disagrees with his player. He takes the novel opinion that the game was lost on the field of play. He told the *New York Post*: "Computers don't win games, computers can't play third base and computers can't hit a baseball."

Still, Oakland's fancy for computers didn't prevent the team being stuffed by underdogs Cincinatti in the World Series. ▨

Systems for soldiers

The theory that today's computer games players will become tomorrow's high tech soldiers is enough to turn even the most battle hungry madman into a pacifist. But it's increasingly becoming a reality.

The next generation of tanks will not have normal gunsights – soldiers will steer and fight through video screens inside the trundling monsters. The display will be not dissimilar to certain games already available on home computers.

Research establishments in the UK, Germany and US are working on systems whereby tank crews can view a battle via television cameras and plan their strategy on computer aided maps generated at a central computer. The graphical maps would be updated every minute showing the tank's position and those of friendly and enemy forces.

The computer will be linked to four data buses – one carrying tactical information, one video signals, one for data communication and the last for driving controls. These machines should be ready within 18 months. ▨

Oric world sensation

Information starved Oric users and general computer buffs alike are to be treated to a new book; *Oric, The Story So Far.*

Thankfully, author Jonathon Haworth has steered clear of paranoid wailings concerning the machine's lack of tangible success. And despite the low rent presentation (it's less of a book than an oversized pamphlet), it's well worth the £1.50 asking price.

Haworth has dug up one gem of a quote from current computer industry person and All Formats Fair organiser Bruce Everiss. When, in 1985, he was appointed boss of distribution company Tansoft he made the uncanny prediction that he would "establish the Oric in its rightful market position".

For a jolly good read call the Oric User Group on 0296 26050. ▨

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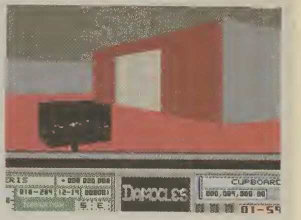

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• *Amiga: there will be a miniature version, but when?*

Amiga owners expect

The increasing army of Amiga owners is greatly looking forward to an Amiga portable. Not to buy you understand, just to relish, inspect and talk about.

For busy Amiga owners it would be neat to own one for the road. And the Amiga's graphical capabilities would make it a sure-fire hit with designers, architects and other high-end users.

Commodore has designed and built an Amiga portable which is currently gathering dust on a shelf in some North American workshop. The technology is there and so is the prototype.

An Amiga portable will appear, it's just a question of when and in what form. It's possible that a seriously heavy duty version will be launched along with the Enhanced Chip Set, high resolution colour screen and Workbench 2. Price wise we're talking £5,000.

There could also be a basic mono version aimed squarely at current Amiga owners who don't mind working in black and white. Something in the region of £2,000 would not be overly expensive.

Commodore spokesman Andrew Ball told *Express*:: "The portable market has changed dramatically from being a technology-based market looking for applications, to a mature market relying on stable technology.

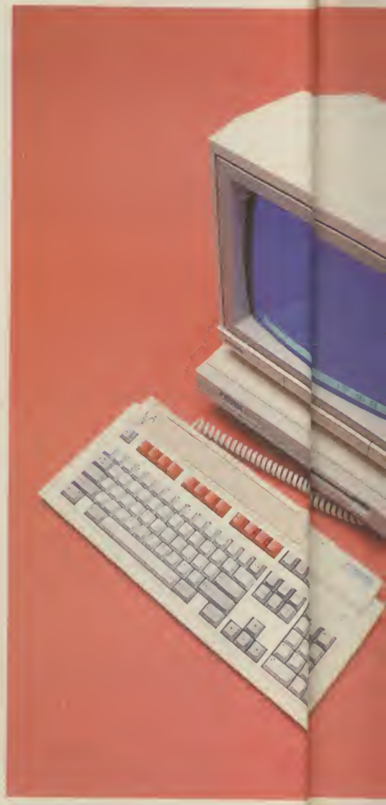
"It's really come of age now that people aren't lugging around 16 pound boxes, portables can slip nicely into your briefcase. It's the same with the Amiga. It's a case of waiting for the technology to stabilise and being ready for the market to mature. We'll launch an Amiga portable or a notebook or whatever when that happens."

Commodore watchers take note. Rumours are gaining currency of an imminent Amiga portable launch, and the stars of market readiness and technology availability which Ball talks of are entering conjunction.

DESKTOPS ON

Successful desktops always attract the scrutiny of those hoping for smaller versions. The Archimedes, Amiga and C64 portables are waiting in the wings – but their introduction is up for debate. Mac and ST portables are already available, with new versions expected next year. Even the PCW has been uprooted from the desk. In a special round-up *Express* looks at the major desktops and their offspring...

Developer appl



Mobile madness

There is constant time span between the appearance of a proud new desktop computer and the moment when somebody pipes up with "where's the portable?" It is estimated to be 3.5 seconds.

Think of a computer and you've probably heard the rumour, pondered the prospects and seen the 'exclusive' story of a portable version soon to be unleashed. It's hard to size-up a successful machine without concluding that, yes, when all's said and done, a portable version would be a very good idea.

Hardware manufacturers are not immune to these fancies. Most have agonised over the commercial prospects of sticking their machines in luggable boxes. Some have contemplated splashing out on some research and development in order to actually make their creations smaller, lighter and, ultimately, better.

Some, such as Atari and Apple, have actually managed to launch machines.

But what are the facts? Why, for instance, do we have an ST portable, but no such thing for Amiga owners? And how far can third party developers go to producing portables of widely used machines?

Mobile PCW: is it a good idea?

The late 1980s saw the first luggable PCWs. Produced by a company called Isenstein there were two models: a standard single-3-inch drive 8256, retailing at £499 and double drive 8512 which sold for £599.

Although neither version came with a hard drive and both were powered by an incredibly weighty lead-acid battery The company sold around 250 of the machines to what David Rathbone of Isenstein calls "PCW enthusiasts". The portables were boxy affairs with small screens, they were simply the normal internal workings of the PCW stacked and a keyboard fitted. After initial interest, the buying public moved away to concentrate on machines such as the Cambridge Z88.

This might not be the end of the story however. The PCW is ideal fodder for a portable conversion. Users are not looking for a high resolution screen; green on black will do. A hard disk is not common in the PCW world and would not be expected, thus lessening the weight of the machine. A 3-inch drive, or maybe even two, could quite happily be accommodated.

The PCW is also quite capable of taking 2Mb of on board RAM with only a few changes being made to the motherboard. With suitable backing from a major company it could be possible to run a CP/M operating system and a word processor such as *LocoScript* from ROM.

It is doubtful whether any of these ideas will ever be put into practice by Amstrad – the Isenstein experiment seemed show that a true PCW portable would not sell in large numbers; PCW users have already been wowed by the Cambridge Z88 – consequently Amstrad's widely expected Z88 basher is a good bet to cut into the market; and with *LocoScript PC* selling well it is a logical market move to use an MS-DOS portable such as the ALT286 series to wean PCW users over to the more lucrative PC compatible world.

Compaq joins the portable race

• *Compaq 386: tops for speed.*

Compaq has launched what is claimed to be the highest performance notebook PC available. The LTE 386s/20 features a 20MHz 386 processor, VGA colour display and a hard disk with up to 60Mb capacity.

The firm, which is currently outselling competitors in the portables race, is offering an optional desktop expansion base into which the portable can be slotted. In this way users can obtain full portability and take advantage of a 5.25-inch disk drive, a back-up cartridge port and two expansion slots. It also allows for connections to an external monitor and keyboard if desired.

Compaq has introduced two configurations of the notebook, the Model 30 incorporates a 30Mb hard disk while the Model 60 boasts the fully fledged 60Mb fixed disk. Prices are £3,995 and £4,295 respectively with the desktop expansion weighing in at £695.

It measures 21.6cm x 27.9cm and weighs 7.5 pounds. Memory upgrade cards are the size of a credit card and 2Mb is standard. It features a 9-inch VGA screen providing 80 characters by 25 lines. The display is edgelit (claimed to allow light to be diffused more evenly than the backlit versions) and sports 640 x 480 resolution in 16 grey shades for graphics based application.

Compaq managing director, Joe McNally, said: "PC users can now carry the power and functionality of a 20MHz 386 computer anywhere, anytime. This machine demonstrates that we're consistently on the leading edge of portable technology with smaller and more powerful machines."

N THE MOVE

pplies the Archimedes principle

• Archimedes: portable next year, but not from Acorn.

An Archimedes portable will be launched next year by a developer working independently from the desktop version's manufacturer Acorn.

The machine is being developed by London based software author and peripheral designer, Mike Harrison, who has been working on the project for the past year. Last week he said the machine would be ready at the beginning of the year.

In effect it's an Archimedes A3000 with 20Mb hard disk. A price tag of £3,500 has been suggested, although not fixed.

Harrison, 25, has written Archie software and designed add-on cards for Watford Electronics among others, and currently works in the computer centre of London University. He has "speeded up" the processor to an impressive 12MHz, and tweaked the machine to serve a colour LCD screen.

The finishing touches are being applied; Harrison's final problem appears to be getting hold of an appropriate carrying case. It will come with a standard 3.5-inch disk drive and 4Mb of RAM. Measurements are 35cm x 28cm x about 10cm and it will be supplied via six batteries with a life of "several hours".

Harrison commented: "I've spoken to a number of dedicated Archimedes owners and they're all interested. Ideally, I want to go into mass production. It's not something for just word processing and basic business purposes.

"I expect initial interest will come from software developers who are crying out for a portable. Archie owners who need a portable and appreciate that it knocks the hell out of the Mac or PC will be interested.

"When it's ready I will be talking to Acorn and hopefully they'll be pleased that someone has bothered to do this. I don't think they're doing one of their own so they shouldn't mind too much. In any case, there's nothing to stop someone buying a machine, tweaking it, putting it in a new box and selling it on."

Acorn isn't thought to be lining up an official Archimedes portable, although informed sources suggest the idea was debated at length during a recent developers conference. No-one at Acorn was available for comment last week. ▩

Macintosh heavyweight

• Mac Outbound: works like a dream, but price wise it's a nightmare

The Apple Macintosh portable has been with us for a year now and has a solid user base. It's specifications are all you would expect from Apple, it comes with a state-of-the-art active matrix liquid crystal display (AMLCD) screen with a 640 x 400 pixel display size. The engine within the machine is the Motorola CMOS 68000 processor running at 16MHz which is twice as fast as the desktop Mac SE.

That's not the only Mac compatible portable on the scene; there's also a clone and talk of a smaller version for next year.

The original machine is impressive though. All the standard Mac ports are supported. These include seven external ports to cope with hard disks, printers and input devices such as the essential Mac mouse, graphics tablets, and even microphones and still video cameras. Also available to the power user on the move are serial ports for LocalTalk connections allowing connections to LaserWriter printers and AppleTalk system networking.

Although the Mac Portable can only be described as a luggable and can be run from the mains it is also battery powered, the lead-acid batteries will last for up to 12 hours and can be recharged.

As you would expect for all of this power and glory, the price tag is high. A Mac Portable 2/40 will set you back £2,855

These aren't the only options for Mac buyers. Australian firm Outbound has launched a clone which is lighter and cheaper than the original. Macintosh computing rarely comes cheap and even that costs £1,995.

Not to be outdone, Apple is currently talking to Sony and the likely outcome will be a state-of-the-art notebook computer featuring sci-fi specifications. ▩

• Stacy: masterful with music.

Stacy: moving music

When the ST portable – peculiarly dubbed Stacy – was launched in mid-1989, it was greeted with a degree of bemusement by the ST faithful. They saw an ST and it was luggable. However, it was beginning to dawn on even the most hardened Atari-phile that there wasn't a whole heck of a lot of point in the machine. For business and most professional purposes you might just as well have bought a PC.

Remarkable as it may seem, Atari had recognised this basic flaw at an early stage. Instead of attempting to cast pearls amongst the business community it focussed its attention on the area in which the ST excels – producing music.

In the event the entry-level Stacy, which was to be a battery powered model with no hard disk, never materialised. Atari's technicians couldn't quite get the power supply right. But the £1,700 20Mb hard disk version which was mains powered found favour among producers of professional music makers. They saw it as a portable MIDI tool and Atari cleaned up.

Now the firm is planning an STE version (see page 9) which comes with a 20Mb hard disk and is battery powered. The mains version will still be kept on (it is a success after all) and the battery powered STE will be pitched at a slightly higher price.

The STE desktop's advantages over its predecessor include an expanded colour palette of 4,096 (the STFM only had 512) and support for vertical and horizontal hardware scrolling. This will have little effect on the portable version since it's a mono machine.

But the STE also boasts stereo 8-bit Direct Memory Access sound instead of the inferior Yamaha YM2149 chip.

The only bad news is that, given the small number of takers at the bottom end of the ST portable spectrum, anything costing less than £1,000 is unlikely at present.

ST users and Atari had found a real use for a portable version of their machine, something which Amiga owners and Commodore appear to be having difficulty emulating. ▩

C64 portable – left on the shelf

Commodore actually did launch a C64 portable in the mid 1980s. It was manufactured at the firm's old factory in Corby and was a good little machine. The SX64 was really just a C64 with hinges, came with a heavy colour monitor and was a wee bit ahead of its time. Despite acceptable levels of success it was canned, but every now and again one will pop up in the second-hand market.

Intriguingly, Commodore built two new C64 portables a couple of years ago. Details leaked out and a few people got very excited. But they were little more than experiments.

Commodore has many forgotten prototypes and the design of these two machines was well within the firm's research and development budget.

The first featured a 1541 disk drive slotted at the back, while the better model boasted the 1581 which was fitted beneath the keyboard at the front. Both had green displays and could hardly be described as state-of-the-art. Insiders at Commodore don't believe these machines, or any C64 portable will appear and there's no reason to disagree. ▩

• Rick Dangerous II: *A superhero with a really square jaw.*

Dangerous returns

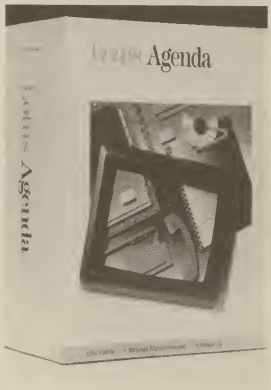
The Fat Man is back, and once again the only man who can save the world is *Rick Dangerous*.

MicroProse promises bigger and better action in this eagerly anticipated sequel to the original *Rick Dangerous* platform game. Available in Spectrum, C64, Amiga, ST and PC formats, prices range from £9.99 to £24.99, *Rick Dangerous II* is in a shop near you at this very moment. ▨

Lotus on the agenda

Lotus wasn't just ending old battles last week (see opposite), the firm at last began shipping Version 2 of its personal information manager, *Agenda*.

Agenda II allows business users to organise their day and their work by cross referencing reminders, telephone numbers, ideas, dates and times. New enhancements include "improvements in ease of use" as well as printing, networking and customising facilities.



• *Agenda II: plan your time*

Four new starter applications are included in the revised version – Activities Planner for tracking day-to-day business activities; Account Manager for controlling information about clients; Information Sifter allows information analysis from imported sources and People Manager is a "resource management tool" (it helps the boss check on employees).

Current Agenda users can upgrade for £95, but for first time buyers it costs £395. ▨

Low cost games machine from the USSR 'des n

SOVIET SPECTR LINED UP FOR U

A Spectrum compatible games console has been produced in the Soviet Union and its manufacturer is considering importing the machine to Britain.

By Colin Campbell

It's based on the Speccy compatible Hobbit, built by Leningrad-based InterCompex. The firm only one of 20 in the Soviet Union producing Spectrum clones, however it is the only company to opt for a games console.

Essentially, the Hobbit Console is little more than a 48K Spectrum without a keyboard. Games are loaded via tape, and it can be hooked up to an RGB monitor or PAL television set. An optional keyboard can also be fitted relatively cheaply.

InterCompex is selling the console for 400 roubles (about £200) along with two games, a joystick and an introductory booklet.

Director Mikhail Ossetinski claimed the machine has been redesigned to improve on the original Spectrum design and to avoid infringement of patents of Sinclair technology which Amstrad bought in 1985.

In the Soviet Union there are no copyright laws – InterCompex has only taken the trouble to avoid Amstrad's wrath in order to enter Western European markets. Ossetinski commented: "We've got a lot of very good contacts in the United Kingdom and we have received letters from people interested in our games machine. We will first be checking that the Hobbit console is durable and then we will be selling the machine to those people.

"Next month I will be coming to England and I hope to talk to Amstrad about this. I want to sort out any potential problems."

Amstrad will no doubt be pleased of the opportunity for discussion. A spokesman told *Express*. "We will have to look at this very closely. We do own many technical patents for Spectrum technology and there could be problems if there are any infringements."

Amstrad fired similar warnings at Swansea-based Miles Gordon Technology when it announced plans for the Speccy compatible SAM Coupé, though the SAM retained compatibility without stepping on Amstrad's technical copyrights

Ossetinski added: "We haven't copied anything. This is our version of existing technology." He estimates that the Hobbit Console is 12 per cent faster than the Spectrum 48K.

It is reckoned that within a year

Fun time for history students

There is a quest almost as fruitless as the search for El Dorado, but educational software publisher ESM thinks it has finally struck gold.

The goal: to make history interesting for school kids. ESM's answer is *Time Traveller*, a history database cum word processor for the BBC micro and Master series.

The package comes as a set of three disks in an A4 ring binder. The main program disk sets up a spreadsheet with scrolling dates from 9999 BC to AD 2100 down the left hand side of the screen. Pupils then insert the blank disk and enter historical events next to the corresponding dates. A sample disk, 100 Years Of History: 1891 - 1990, is also included.

As only one entry can be placed next to each year the idea is for pupils to use *Time Traveller* to show the chronology of various linked events, such as the accession of monarchs or beginning of world wars. Different disks can be used for each chain of events and another facility allows pupils to 'open up' a year and add more details.

Available in December, *Time Traveller* will retail for £37.50. Call 0223 65445. ▨

Fast food king chips in

If we told you that Burger King has become computerised you might have wonderful visions of a world where your burgers need never be touched by a greasy, acne-ridden, teenage hand ever again.

But don't build up your hopes, because so far the microchip has only invaded the company as far as its payroll system.

Burger King has installed a £600,000 employee database. Aside from handling the wages for the company's 5,000 or so staff, the system also keeps track of staff movements.

This is especially handy for a company which has to issue 20,000 P45s to departing employees every year. ▨

BURGER KING
BURGER KING
BURGER KING

• *Burger King and chips to go!*

Intel's tiny wonder

Intel has launched a highly integrated version of its 386 chip designed for use in portable computers.

The 386SL and its satellite chip the 82360SL could become the central axis of a 32-bit PC on a board measuring as little as four inches by six inches.

Intel is calling its latest chip a major technical step, not only because of the size of the article, but also its low power consumption.

The firm is also talking about a new architectural extension for power management, which could allow users a 50 per cent increase in battery life.

Vice president Mike Aymer commented: "Notebook computer users are asking for more functionality and they want 386 performance without compromising the system's size, weight and battery life." He added: "We expect to see many new features on notebooks, manufacturers can really get creative using these chips."

The two chips are compatible with all PC applications which run on 80386 processors. ▨

oes not infringe' Amstrad's 8-bit copyright

RUM CONSOLE UK LAUNCH

there will be 600,000 users of Spectrum compatible machines in the Soviet Union. At present, there are about 20 companies producing different machines based on Sir Clive Sinclair's original design.

"The reason is that it is very cheap to produce. I hope that in two or three years we will all be using Amigas, but at the moment that is far too expensive," said Ossetinski.

He also claimed that the Hobbit console could be sold at "less than 200 roubles" with the company still making a profit. But undercutting competitors is frowned upon in the Soviet Union. However, it's par for the course here, and the Hobbit console could be sold here for much less than £100. ▩

ИНТЕР КОМПЕКС
БИТ
ИНТЕР КОМПЕКС
ХОББИТ

• *Spectrum console: UK launch planned, but Amstrad will have its say.*

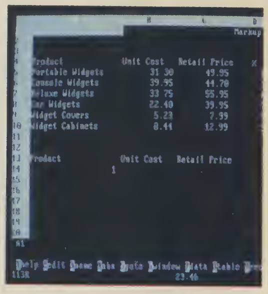
Paperback write-off

The latest episode in corporate skirmishing has just ended with Paperback Sofware and Lotus Development Corp agreeing a six figure out-of-court settlement. This arises from the 'look and feel' suit relating to Lotus' *1-2-3* package and Paperback's *V-P Planner*.

Paperback agreed to pay $500,000 (£260,460 at today's rate) and discontinue manufacture and sale of its package. Lotus claimed that the spreadsheet module from *V-P Planner* was copied "keystroke for keystroke" from its own. Paperback has also agreed to drop its impending appeal against a previous ruling. In the US, stocks of *VP* will be sold until the beginning of December, thereafter Paperback will have to destroy all spreadsheets left over.

The out-of-court settlement came swiftly after US District Court Judge Robert E Keeton ruled that Paperback had infringed copyright.

UK users can still get their hand on what may well become a computing collectors item as Paperback's British branch is allowed to sell copies of *V-P Planner* until currently held stocks run out. Call 0245 265017. ▩



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ortable Widgets         31.30        49.95
onsole Widgets          39.95        44.70
eluxe Widgets           33.75        55.95
ar Widgets              22.40        39.95
idget Covers             5.23         7.99
idget Cabinets           8.44        12.99

roduct              Unit Cost   Retail Price
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• *A soon to be collectors item. The legendarily illegal* V-P Planner.

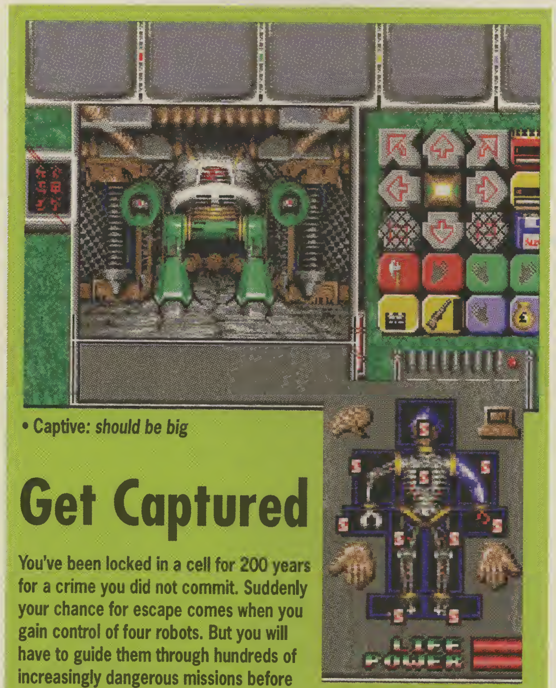
What a waste

A £3 million computer bought by the National Health Service 18 months ago is still not out of its packaging.

The IBM 3090 mainframe has never been used and now it's to be sold off for less than £1 million. It was originally bought in to handle the accounts of hospitals in the Hampshire area, but is currently lying in the corner of a warehouse.

Almost unbelievably, a special £1 million 'cooled office' is being built to hold the machine – even though it won't be used. The IBM computer is the biggest ever bought by the NHS, but a spokesman said the machine no longer fits into its Information Technology plans.

The Daily Mirror last week calculated that the wasted money could have been spent on 1,400 hip replacements, or cancer treatment for 500 patients. ▩



• Captive: *should be big*

Get Captured

You've been locked in a cell for 200 years for a crime you did not commit. Suddenly your chance for escape comes when you gain control of four robots. But you will have to guide them through hundreds of increasingly dangerous missions before you finally gain your freedom.

This is the scenario for Mindscape's much-anticipated new title, *Captive*. A fast moving adventure-style game featuring battle action as well as booby traps, thought-provoking puzzles and a strange race of shopkeepers. The playing screen represents the panel through which you control the robots and the animation is quite stunning.

Retailing at £24.99, the Amiga and ST version is available now, with a PC version to follow later in the year. ▩

Philips steams ahead with launch of CD-I

Philips has finally released its multimedia Compact DiscInteractive (CD-I) system. Although the recent launch was aimed at business and professional users, it looks like it's full steam ahead for a full consumer system by the planned date of 1992.

The business systems as launched comprise the CDI 601 and 602. Both machines have digital sound and RBG, PAL and NTSC televison standards. They also have memory expansion slots and RS232c communication ports and mouse control. The 602 comes with a 3.5-inch floppy drive.

CD-I features an impressive range of interactive media such as digital stereo audio on four levels, each having a differnt compression level and sound quality. There are several levels of visual input and output including 'full motion' video with all the functions you would expect from a home VCR such as forward scan and slow motion.

• *CD-I at last: first systems launched last week*

Still video is also included, as is a system called RGB 555 which allows over 32,000 colour variations for each picture element or even pixel.

In the run-up to the public launch in 1992, Philips has been allying itself with over 100 developers and hi-tech producers. Big names such as Sanyo, Sharp, Pioneer and Yamaha have already pitched in.

While the business angle of CD-I is towards point of sale, presentation, training and demonstration applications, it is likely that the consumer launch will see interactive language learning (Philips has already teamed up with Maxwell communications in this area). There are also plans for games – *Deja Vu* a Mac favourite – is already available in CD-I format, sports, a full sports encyclopedia is ready, and even a classical music jukebox. Education is also deemed to be an active area.

No statement relating to prices has been made, but with the growth on optical disc and digital audio technology already strong, and with other CD-based systems such as CDTV looming, 1992 could well see the start of a CD-I war. ▩

SHOW NIBBLES

A mixed bag of shows have been announced for the next few months. It's time to get out the diary:

- The *Mac User* Show will take place at Olympia on 7-10 November. As well as launches and previews, the show will also feature a DTP workshop and sessions on the Mac in business and professional graphic design on the Mac. For more details phone 0256 83583. Tickets are available on 0734 333100.
- The Commodore Christmas Show will feature The Games Arcade, a "unique forum for software launches," claim the organisers. Find out for yourself at the Novotel Hotel, Hammersmith from 16-18 November.
- A Design and Technology roadshow specifically aimed at promoting CAD (Computer Aided Design) hits the road on 19 November in Peterborough. Exhibitors such as Hewlett-Packard, Research Machines and Roland will be demonstrating new products. Entrance to all dates is free. Ring 081-868 4466 for information on dates and venues.
- For comms enthusiasts Online Information 90 is due to take place at Olympia 2 on 11-13 December. For more information phone 0865 730275.
- The Society of Software Authors is holding its second Developers' Conference in Bournemouth on 26 January. Tickets are limited and further details are available by phoning 081-503 2521.
- The second MIDI Music Show will take place at the Novotel Hotel, Hammersmith on the 26 - 28 April. Over 160 companies will be taking part and the event is aimed at both professionals and enthusiasts. Phone 0726 68020 for further details.

Students get a nasty shock

For a machine that is supposed to make life easier, the computer can make some people's lives a lot more difficult. Students are about to find out how as their worst nightmare becomes a reality: a computer which weeds out exam cheats.

Two professors at Toronto University, who were probably real swots at school anyway, have developed software which analyses the incorrect responses on completed papers and works out the probability of them being repeated. This information is cross-referenced with seating plans so that cheats can be pinpointed.

So no more sneaky glances at your neighbour's answers. But can the computer suss out the old hanky trick yet?

Sinclair's road runner

Has Sinkers finally gone off his rocker? The "father of home computing" reckons he's going to solve a fair proportion of the planet's problems with a new invention. And we're not talking about the next Spectrum.

This time Sir Clive's come up with a four-seater car, which runs on nothing more than electricity. Remarkably his saloon can whizz 250 miles up the motorway at 80mph off one charge from the mains.

Sir Clive's last attempt at an eletrical vehicle was the C5 which didn't really set the world alight. This time he says he's got it right.

Sir Clive won't say when his machine will be ready, but revealed that it will have very few moving parts "so it won't run out".

Is this guy for real or what?

• *Sir Clive and the C5.*

Tempting offer from PCW to 286

UPGRADING ATTRACTION

A 286 PC is to be launched at the enormously tempting price of £299. And curiously it's claimed to be Amstrad PCW compatible.

Isenstein, which has always been active in the PCW arena, is hoping to attract PCW owners looking to tap into the PC's software base and upgrade to a much faster machine.

Anyone who does splash out the £300 can simply rig the machine up to the PCW and take advantage of the installed monitor and printer.

The as yet unnamed machine is also being pitched at owners of aging PCs. If you own an old XT with a decent monitor, you could hook the VGA PC into your system. It runs at 16MHz, comes with 1Mb RAM and a 1.4Mb 3.5-inch disk drive. There's also a video graphics controller. The only downer is that you'll have to buy a copy of DOS, usually at about £50.

Isenstein's David Rathbone commented: "It's great as a stand-alone computer, but I think upgraders will be attracted. They can take advantage of the peripherals and software already in their possession."

Call 0244 822768.

Ritz drops Singh hacking charge

Notorious hacker Edward Singh found himself in the clear last week when fraud charges were dropped against him.

This turn around in the fortunes of Britain's foremost computer bandit occurred only days before he was due to appear at Sutton magistrates court on charges arising from the Ritz video hack (*Express* 102).

Singh had broken into the video chain's system, changed files and showed how easy it is to undermine a 'secure' computer system. He and other hackers claim that the exercise was an academic one, rather than one with criminal in intent.

It is likely that the case was dropped because no actual fraud had taken place, no physical matter had been stolen and Singh had not profited from the hack.

According to the man himself when he contacted *Express* last week, the Ritz chain and legal authorities "couldn't make it stick."

Had Ritz made use of the recently introduced Computer Misuse Act, things may well have been different. The mere act of hacking is qualified as a crime under the Act, which looks like it will be strengthened if a private member's bill tabled by Emma Nicholson MP comes to fruition. The MP's private bill seeks to make electronic eavesdropping, as well as hacking, illegal.

- Make sure to read Edward Singh's side of the argument on *Express'* The week in view column next week.

READ STEVE GOLD ON PAGE 32

High flier

Two navigation experts from Ramsgate have come up with a portable device which has broken the mould in navigation technology.

Skyforce Personal Navigator works by calculating an aircraft's position by traditional methods – via fixed VHF radio broadcasts – then cross-referencing the co-ordinates with information it holds on 700 or so towns in the UK and along the coast of France. It then expresses the result in reference to the nearest town.

For example, if the plane is two miles south of Sandwich, that is exactly what the device tells you. No messing with longitude and latitude here.

And from next January the Navigator will be able to do the same for the whole of France, Germany and the Low Countries.

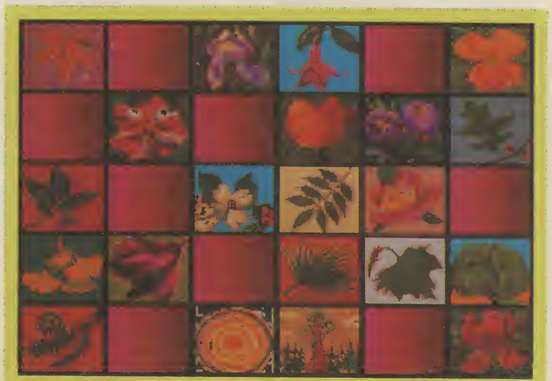
At about the size of a video cassette, the navigator is powered by a built-in battery. In flight, it runs almost automatically, strapped to the pilot's knee.

With a cost of just £500, the device is also several thousand pounds cheaper than the equivalent conventional navigation electronics.

Feline Fine

Bob Cat has to rescue his beloved Claudette from an evil Mad scientist in *Nine Lives* from ARC.

A platform game with four levels, *Nine Lives* is available for the Amiga and the ST from this month and costs £24.99.



• *Match Pairs : someone's not quite got the hang of the rules.*

Lavish child's play

Match Pairs is a classic child's educational game which now has a new dimension as a computer game.

Aimed at four to 12-year-olds, the Electronic Arts game is a memory test which involves turning over lavishly illustrated cards and attempting to make pairs.

Following its release in the US, the European version of the game has the option of being played in English, French, German or Italian, making it a fun way of expanding a child's knowledge of foreign vocabulary.

It has levels of play based on learning skills, ranging from non-competitive games to playing against a computer opponent with an infallible memory. Subjects range from flowers to the Big Bang and each time a card is turned over a computer voice says the name of the card.

Available from this month for the Amiga, *Match Pairs* will cost £19.99.

Atari to launch enhanced portable STE

STACY STEPS INTO ACTION

A portable version of the Atari STE will be launched in January, *Express* can reveal.

As yet, no prices have been fixed for the Stacy STE although the current STFM model costs £1,799. The new machine will come with a 20Mb hard disk and 4Mb RAM. As with the original Stacy 4 it will run on a Motorola 698000 running at 8MHz.

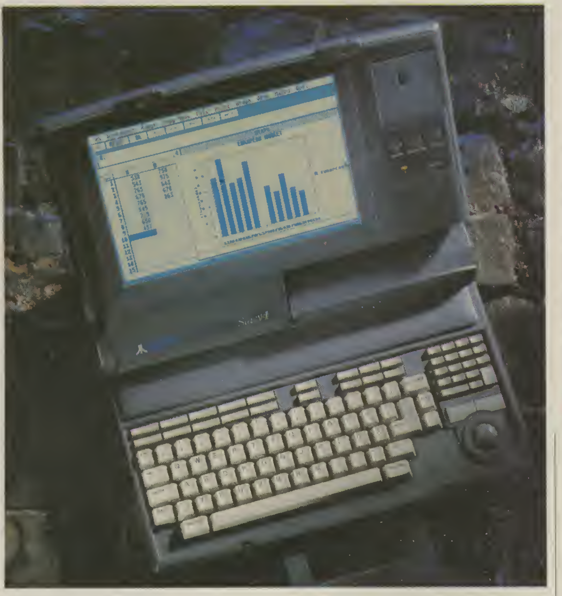
The crucial difference is that, unlike its predecessor, the Stacy STE will run off batteries. Atari had planned to launch a low cost battery powered Stacy, but developers failed to perfect the technology.

However, the STE version will run off standard batteries with a life ranging from five to 35 hours (depending on use). The other major improvement will be stereo 8-bit Direct Memory Access sound. This replaces the old and inferior Yamaha YM2149.

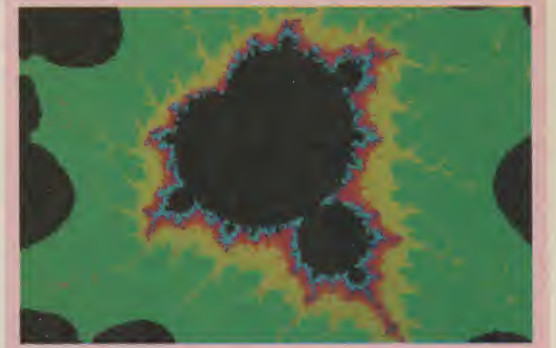
The Stacy has been welcomed by musicians who use it for composition purposes and a MIDI tool. But although it can be hooked into musical instruments, its capabilities for making sounds alone have hitherto been restricted. It will also be possible to play samples without affecting the machine's performance on other more important tasks.

The supertwist backlit mono screen is supported by 32K static screen RAM and boasts a resolution of 640 x 400 pixels.

There are MIDI, monitor, serial, parallel, floppy, hard disk, RS232 and joystick ports with an optional 1200 baud external modem. It weighs 15 pounds.


• *Yet another addition to the ST range.*

Fractals are go



The Catalogue of Chaos is the list of wares from Britain's first fractal specialist. The company is called Frachaos and it has just started to market disk-based fractal images for the PC and Mac user. Amiga and ST versions are planned "if demand is high enough".

Fractal images are becoming more and more familiar, they have cropped up in *Star Trek* films (the exploding Genesis planet), T-shirts and medicine. A fractal image is a repeat of form such as those which in appear in nature – a snowflake is an excellent fractal example.

Frachaos will supply PD disks packed with fractal wonders, as well as full-priced images which can be bought as seen or even tailor-made to your needs. The company claim that its disks will contain fractals not previously available in this country. Along with computer-based fractals it will also be selling books, videos and 'fine art' prints.

Prices for the disk chaos start at a few pounds for the PD selection, while full images begin at £30 and go up to £250. Call 0326 40973.

Ocean throws a lifeline

With a little help from its friends at Ocean, Childline will be getting its message across to gamers this Christmas.

Upcoming Ocean titles such as *Robocop II, Total Recall, Narc* and *Pang* will be among the first games to include information about the charity in their packaging. The information will only be put into the kind of games which would appeal to younger gamers. Childline is a counselling line for troubled kids who need a sympathetic ear to turn to.

Ocean's Gary Bracey said: "Childline had a stall right next to ours at the PC show and I just got talking to the girl from Childline. She said that they were looking to get into a suitable youth market and the idea just came about."

Atari two face jail in piracy scandal

Atari's Taiwanese subsidiary has been charged with piracy following the discovery of illegal copies of business software earlier this year.

Atari Taiwan has been indicted along with chief computer operator Kuo Mao Hsing and an employee Chen Jian Chung who is alleged to have brought pirated copies of Lotus *1-2-3* and *dBase III* into the company's offices.

If found guilty, they both face up to three years in jail and a fine of £300,000.

A raid last spring was initiated by the Washington-based Business Software Alliance. Chairman of the board, Tom Lemberg, commented: "The indictment of Atari Taiwan and two of its employees sharply illustrates the risks to an organisation when there appears to be a lack of control and management of software resources."

Atari in the UK and US were again distancing themselves from the scandal. A spokesman in London said: "The situation is very confused, but we feel that it's all been blown out of proportion. We accept that this software was found on our premises, but stress that it was the independent action of employees." Atari is taking no action against the two accused.

Atari's US boss, Sam Tramiel, has already accused the BSA of pedantry, arguing that with the software industry losing millions of dollars through organised piracy outfits, its resources would be better spent elsewhere.

• *Elonex 386sx: no frills, and a price to match.*

The price is right

If it's a serious machine at a reasonable price you're after, then at under £1,000, the slimline 386sx desktop PC from Elonex is well worth a look.

A 32-bit machine, the 386SX boasts 1Mb of RAM, a fast access 40Mb hard disk, a monochrome VGA monitor, MS-DOS 4.01 and Microsoft Windows, it costs £925. A model with a colour VGA costs £1,095.

Other standard features include facility for expansion of up to 8Mb of RAM directly on the system board and three AT-type slots, one parallel and two serial ports for system expansion.

So, while not a remarkable machine, the 386sx should be attractive to those who want the results without the frills.

Budget action

Jungle action, aerial dogfights, space adventure and an embassy siege provide the exciting backdrops for four new releases from Digital Integration's budget arm, Action 16.

Maya is an adventure set in the depths of the jungle, while *Rotor* provides arcade-style flying action. Meanwhile, captives in an embassy have to be rescued by SAS types in *Hostages* and *Cosmic* is a graphic challenge in outer space.

Originating in Europe, the games were favourably reviewed when first released, but failed to reach a wide audience, so Action 16 has high hopes for them this time around.

"They were good games when they were originally released, but did not have a high profile, so it's almost like a first time release," says the company.

Available for the ST, Amiga and PC (except *Cosmic* which is unavailable on the PC) they all retail at £7.99.

THE WEEK IN VIEW

Is Europe really one big market for computers? Ex-pat writer Mike Hardaker ponders from his French chateau...

At the Software Publishers' Association conference in Cannes this summer, I was struck by how many of the US delegates saw Europe as a single, homogenous market. At least that's the way they thought when they arrived in France. They left with some slightly more sensible ideas.

I suppose the Americans can't really be blamed for their initial view of Europe. After all, we do keep on shouting about 1992 and how it's all going to be so straightforward from then on.

The reality, of course is very different. Even if ERM and the Single Market do provide the economic underpinnings for pan-European trade, the local differences between countries can be pretty striking, not least when it comes to computers. Each nation has its own little quirks, which can result in a successful British product having no chance in Germany, say.

• Mike Hardaker – computers in Europe are not yet on the same wave length

For example, Apple has an incredibly high profile in France – wherever you go there seems to be a Mac or two (the Apple II is still a big seller, for heaven's sake!). It's also Microsoft Country, where Bill Gates is quite definitely 'The Main Man.' Look over a PC user's shoulder and the odds are that you will see a copy of *Multiplan* up and running. Lotus *1-2-3*? Forget it.

Germany, on the other hand, has almost no Macintoshes. German law forbids office workers to use the Mac Plus/SE 9-inch screen. This has led to the Amiga being used by professional designers in the same way as the Mac is in the rest of the civilised world. German Amigas don't run games: they have powerful graphics applications loaded on them.

Denmark is notable because GEM is the dominant GUI. Windows? Never heard of it. Very few software houses have bothered to translate their programs into Danish, but DR made an early commitment and has reaped the benefits.

Europe as a single, homogenous market - it's an attractive idea, isn't it? Maybe one day... ■

Express Access

Hey! Get in touch with us! *Express* is always on the look out for news leads and tip-offs – and we'll pay you for passing them on too!

Also, if you have any burning ideas for features or surveys then drop us a line – remember, we cover every aspect of computing.

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Back from the USSR, Haydn Fitz-Williams takes up the reins once more and answers your mail.

Write and tell HFW what you think about anything under the Sun! Reach him at: *Express Mail, 30 Monmouth Street, Bath BA1 2BW.* Sorry, no personal replies, even with an SAE, as we're too busy writing the magazine.

■ Buckets of praise

Like the rest of Joe Public, I am quick to put finger to keyboard and run off a letter informing all and sundry of any injustice I feel I might have suffered at the hands of another, normally a mail order company.

Not so many write in to compliment firms who offer excellent standards of service; well I'm going to set the record straight.

I uncategorically recommend Gordon Harwood Computers, a company that advertises regularly in *Amiga Format,* to any of your readers.

I have used them several times in the past to purchase both a monitor and blank disks, and have found their telesales staff both courteous and efficient. On Monday 24 September I ordered an A590 with 2Mb of RAM expansion installed. It arrived Wednesday 26 September, but unfortunately, although the RAM was fine, the drive didn't work.

I rang Gordon Harwood Computers first thing Thursday 27 September and without so much as a hint of quibble, they arranged for a new A590 plus RAM expansion to be delivered by courier (at no additional cost to myself) the following day. On Friday the new drive was delivered and I'm glad to say that it is working just fine – how's that for service?

I'll finish by saying I think your new format is a vast improvement, although I've read and enjoyed *NCE* since issue one, and will be sure to include a subscription on this year's Xmas list.

Patrick J Cleary, Harlow, Essex

Not relation to Gordon, I trust... Well, it's nice to hear someone offering praise rather than complaints, Patrick.

H F-W

■ Bye bye Beeb

I am a BBC micro user. You recently dropped the column dedicated to my machine. I have just one thing to say: Good riddance!

Well that surprised you, didn't it? You thought I was going to whinge. But no, I fully commend your decision to dispense with the measly quarter or eighth of a page, barely enough room to print a single headline, in favour of more news, more features, more competitions, and, in short, a better magazine. Congratulations.

I have bought every *NCE* since issue 25, and have consistently found it interesting, informative, and, above all, a refreshing change from those tedious monthly potboilers. Incidentally, further congratulations are due on finally dropping the ridiculous 'Top 50' guides, which were a complete waste of space. Centrefold makes a superb replacement; I look forward to reading Tim Smith's wit and repartee every week.

Rafael Jay, Weston Road, Bath

I'm not sure that Tim Smith's ego can stand much more of this, RJ. We've already had to extend the office to accommodate it!

By the way, a 'potboiler' is a work of literature that is written just to earn enough money to boil a pot with – in other words, to keep body and soul together. Etymology is all part of the service...

H F-W

■ Begging letter

Congratulations on reaching 100. Did Lizzy Windsor send you a telegram – or maybe Phil-the-Greek did the honours? If he didn't for gawd's sake don't mess around with his 'BT Gold' Mail box. Just in case it's still in there – remember what happened to the last two blokes who did that!

I have bought your mag since the very first issue and, unlike the other thousands of sycophants writing letters in the hope of a 'fiver' I can prove it! – I had a letter published in Issue 2 or 3, so I reckon I deserve a 'fiver' (or more) as a 'long service' award, don't you? (Go on check down in 'archives' if you don't believe me – but watch out for Editor-eating spiders down there, won't you)? I promise not to spend the fiver on 'naughty' P D software, I will use it for a charitable purpose – putting overpriced lead free petrol in my dehydrated Ford 'Nutter-Bastard'!

Note also: I have never written a boring letter along the lines of 'my N-Cube is better than your ZX81' or complained when the minority computers were scrapped or any rubbish like that. Look forward to receiving the cash soon – oh – here's to the next 100!

D Griffith, Hammersmith, London

Us? Hack? It's about as likely as *NCE* receiving a telegram from the Queen. And just because you have been a loyal reader, you can't expect your begging letters to work Mr G.

H F-W

■ Computer gardener

Evesham Micros recently had a clear-out sale, including some MicroProse games for the CPC on 3-inch disks at 99p each.My apologies to all other 3-inch disk users for having snaffled the lot; I was delighted to get half-price brand new Amstrad disks and my nephew was delighted with the 'free' games on the half-price disks he bought.

To answer the query posed just before you dumped the PCW column: I carry on using a 8-bit machine for the same reason I still use a wheelbarrow and hand fork in the garden – I don't need a tractor and power tools in the garden, and for the use I make of it, the PCW is good enough.

Furthermore there is loads of dirt cheap shareware and public domain software. That's even before your sister magazine *8000 Plus* came out with its special offers.

I was tempted to dump your magazine after you dumped the PCW column, but hang it all, where else can I find such up-to-date info on the whole computing scene along with articles I feel I have to keep (just in case I ever do buy another machine)?

Don Price, Redditch, Worcs

So it was you, was it? I had hoped to pick up a few cheapie disks myself, as my mother lives in Pershore and I usually drop by Evesham Micro's shop when I visit her, but by the time I got there, the deal was over and done.

Anyone else in the Evesham area on the morning of Saturday 17 November might like to call in at the new Evesham Micro showroom which is being officially opening at 10 o'clock that morning. Apparently there will be some extra special bargains on offer. It's at Unit 9 St Richard's Road, by the way...

They won't be selling gardening tools, however, Don.

H F-W

■ When is a bug a bug?

I'm afraid that I have to disagree with your reply to Stephen Ward's letter in *Express* 102.

Whilst it may be the case that many bugs aren't bugs at all, but just a simple matter of the user not reading the manual properly, I feel that whether you pay £2, £20 or £200 for a game or program it should work perfectly with no bugs. A game costing just £2 would be very simple, with maybe only one level and wire frame graphics. A £20 game would have more levels and better graphics, and a £200 game would be out of this world, but whatever they cost they should all work with no errors.

Now onto the new look *Express,* I like it very much and I accept your reasoning for dropping the columns for the older minority machines. The layout of the magazine is better and I have no objection to the ST column being printed on re-cycled bog paper. However, I don't like Centrefold as it's not my sense of humour. I wouldn't stop buying *Express* just because of it but I do tend to skip past it now rather than read it. Centrefold that is, not *Express.*

Finally what about printing a Rogues' Gallery of the *Express* staff? We see Keith Pomfret's picture in Tech Tips each week how about mug shots of the rest of the team?

P J R Mead, Wallington, Surrey

You're quite right, of course – 'RTFM' as they say in certain circles. And it's good to see that someone is having a go at deflating Tim Smith's ego.

As to the Rogue's Gallery – are you REALLY sure you want this? Have a fiver for you comments on software, and ponder your strange request...

H F-W

■ Ultima delay

Any chance of finding out when *Ultima V* on the Amiga will be out? I sent me dosh off for the game in March. I phoned a certain mail order. company in May and they said June, then July, then August, then September. I got jerked off waiting and they allowed me to get a couple of other games instead.

They're still advertising the aforementioned game as available. Under the Trades Description Act or possibly the advertising standards are M.O. companies who do this liable? That is, if they do not make clear that the game is not in stock – or even produced yet for a particular computer – as per their ad. It seems they are being a wee bit 'economical' with the truth. This is the first time I've been caught like this – MJC Ltd of Herts sent my cheque back and told me to phone later when I ordered *Middle Earth* at the beginning of last year, an attitude which I found extremely commendable.

D Magill, Cheltenham, Gloucs

Your wish is my command. According to Mindscape, *Ultima V* is due to ship in a couple of weeks' time – if you have any difficulty, get in touch with Mindscape's Mail Order department on 0444 441066. And ask that pesky mail order company for your money back – it's very naughty to advertise goods that you don't have in stock as being available.. Both Trading Standards and the Advertising Standards Authority might be interested in hearing from you...

H F-W

■ User space

The problem that Mr Ward has experienced with the DELETE RAM#? (mentioned in Issue 102) is one that I have come across myself. The problem is not the instruction but an erroneous user space.

Typing: DELETE RAM[space]#? will delete all files on the current drive. If you doubt – me try it. I made the mistake once and it cost me the entire content of my devpac source disk. Needless to say, I have not tried it again.

As for your *Amiga Format* technical advice (sick) – is 'PLONKER' the best they could come up with ?

My God! The septic patronising remarks they come out with, they must think the entire population of computer users are on the same level of intellect as themselves.

Sorry about that, but I do not find asinine replies amusing, especially ill-informed ones.

Mr C W Cannon, Romford, Essex

Asinine indeed! Can I help it if I quote the *Amiga Format* technical editor verbatim? No I can't. But at least you have cleared up the confusion Mr C.

H F-W

■ Turing test

My computer is not better than your computer. Nor is the Met Office's Cray supercomputer at all superior to my father's Psion Organiser. Indeed, every programmable computer in existence is completely equivalent to every other one.

Alan Turing proved in 1937 that all universal Turing machines have precisely the same capabilities and effects. All general purpose computers are in effect sophisticated universal Turing machines. Therefore all computers, given enough external storage space (disks, cassettes, etc) can perform all the same operations as one another.

Turing's original design for the machines was a box which could read, write to and move an infinite tape with a finite amount of data on it. The box had a finite number of internal 'states' which, along with the data on the tape, controlled its actions. The tape would be marked off into squares, and the machine would read a square, cross-reference the symbol on that square with the internal state it was currently in, and find out which state it should go into, what it should change the symbol to, and in which direction it should move the tape to find its next piece of data. The machine would originally be fed with a tape containing the operations later, with the result of the calculations now on the tape. Turing proved that any mechanical or computable operation whatsoever could be performed in this way.

A universal Turing machine is one which takes in on the tape the list of its states and the instructions pertaining to each state. This is equivalent to any programmable computer, and therefore any computer, from the ZX81 upwards, can perform the same operations as any other.

So if anyone out there owns a NeXt workstation and cassettes, you can contact me through H F-W secure in the knowledge that you are getting a good deal.

Leigh Caldwell, Langside, Glasgow

Not 'exactly' the same capabilities and effects, Leigh. For a start, the Cray can do any given hard sum considerably faster than your Dad's Psion... but an interesting twist to the 'MCIBTYC' debate H F-W

■ Show off...

I thought that I would drop you a short letter showing my eight computers, but why oh why did you not do this three weeks ago when I had ten computers? I have just sold my C64C and disk drive to my cousin, and my Sinclair Z88 to a man in the Isle of Man. That was of course sold through your free readers ads (grovel grovel). I think with ten computers I would have had a fair chance, but if not I'll settle for seeing my name in your mag.

I suppose that while I am writing I will add my 10 pence worth on the subject of what the best computer is, and that is of course the one you are using at the present moment in time. Any computer that gets anyone interested in the art of computing is a good one.

If you have the money buy a bigger and faster one if that's what you want, but don't run someone down because they cant afford or do not want a 16-bit or 32-bit machine. I am more than happy to play around on my BBC B than any of my others computers. Unless I am using an art program (*Canvas* is my favourite at the moment) then I use my 520 STFM.

Lastly, I like the new layout of the mag. But whatever you do someone will complain about it, I mean saying you will not read this mag any more because you dropped a machine specific column is stupid. Take the Atari 8-bit column, it had a quarter of one page – that's less than half of one per cent of the total magazine.

To stop reading just because of that is just plain stupid. If that was all they were interested in why did they even bother to buy it in the first place? Surely buying a machine specific magazine would have been better, but I guess that's being too sensible. Anyway, as I was saying, thanks for a great read and I for one will keep buying each week (especially if you send me some loverly wonga for having the most computers)

I often read the word (sic) in your comments what does it mean?

Mr S P Toomey, Croydon, Surrey

• The very fine Toomey collection

Well, alright then, I'll send you a couple of fivers for your collection. It'd have been more if you were the kind of person to own a Mac IIfx of course...

Anyone else out there care to have a go at beating Mr Toomey at his acquisitive game? H F-W

MAIL SHORTS

■ Well spotted!

Haydn Fitz-Williams – you ruined my read of the 100th issue of *NCE*. There it was on page 14, for all the world to see. (Well me at least). The dismembered body of my last letter to *NCE* in the Mail Shorts, chopped up and rearranged to suit your unclean methods of filling space in the *Express* Mail page.

Mr Williams you've been rumbled, you have openly set out to corrupt an innocent letter and to deliberately mislead the readers of *NCE*. I demand an apology be printed in *NCE*, and the bits of my letter you did print, to be printed in full truth as they were written, although an apology will do.

What do you mean by 'r' in intellectual?

A Geordie, Near Sunderland

It's a fair cop, but the person who typed in the letters is to blame.

H F-W

■ Sex machine?

Thank you for printing the letter about my Oric Atmos computers in issue 94. In reply to Richard Blakeley's letter (issue 101), the Atmos has made us better lovers because its wedge-shaped case allow us to wedge the bedroom door shut to prevent any interruptions from our 6-year-old daughter. We are considering upgrading to a ZX81 as it has better shaped casing.

R W Crisp, Meanwood, Leeds

I wonder how long it will be before Dr Comfort sits down to write another best-selling book called *The Joy Of Computers*?

H F-W

■ In training

Your readers might like to know that most of the games featured in your article about Spectrum railway games are also available for Amstrad, BBC and C64 (on tape or disk) and that all games are available by mail order from 20 Moorville Drive, Carlisle.

I have also produced a Spectrum 'Carlisle Power Box' traffic control, priced £11.95, which has a full colour moving track diagram.

Ashley Greenup, Carlisle

■ Rather rude

A few years ago the computer manufacturers 'Wang' decided to move into the British market with an advertising campaign that proclaimed "Wang cares" (say it quickly). Needless to say the campaign was withdrawn.

C Stevenson, Heathfield, Sussex

A-Max II™

EMULATION SENSATION

Ready Soft's acclaimed Mac emulator returns with a host of new and improved features. Jason Holborn checks it out.

Let's face it – we'd all like to own a Macintosh. Steve Jobs' masterpiece of computer design has earned itself the rare privilege of being something of a cult computer. But, mainly due to the high price that they demand, Macs have remained the tools of wealthy publishing companies and yuppie businessmen. What is the average computer user to do?

The obvious solution is to buy an emulator. For Amiga owners, ReadySoft's A-Max is the only choice. However, due to several major limitations within the original, A-Max failed to be accepted as anything more than a curiosity. Now, after just over a year of rumour and speculation, ReadySoft has finally released the long awaited follow up.

BIG MAC AND CHIPS

A-Max now comes in two different flavours – an all-new internally mounting card for those of us who are lucky enough to own Amiga 2000s and 3000s and a plug-in cartridge version for those people with somewhat humbler machines. Unfortunately, ReadySoft is still at work on the card version of A-Max (that probably won't be out until January of next year!), but A-Max II for the A500 is available now.

The first thing you'll notice about this new release is that the emulator hardware hasn't actually changed – that infamous grey block still sticks out at the back of the 500 with about as much elegance as Commodore's own TV modulator. Indeed, A-Max II is largely a software-based upgrade, which is great news for those of us who already own A-Max version 1 (you can upgrade for £30).

Just like the original, A-Max II won't do anything until you've installed a set of Macintosh ROM chips inside the cartridge. Luckily for A-Max II users, Entertainment International (ReadySoft's UK distributors) has sorted out the problem of obtaining Mac ROMs for A-Max, so it's now possible to buy a complete A-Max system in one go (although this tends to add about £100 to the price!).

So we're ready to rock... or are we? Well, here's the bad news – before you get to see anything even remotely Mac-like, you have to carry out a fairly simple (this is what ReadySoft claims anyway!) installation process. This involves building a boot disk for A-Max II consisting of the Mac 'System' and 'Finder' files. Unfortunately (again), you're going to need access to a real Mac to be able to obtain these files (if you don't know anyone with a Mac, then you're in real trouble!).

To allow you to bring these two files across onto an A-Max compatible disk (the basic version of A-Max II can't read Mac disks – contrary to rumours), A-Max II produces a special format disk that can be read by both the Mac and the Amiga. This 'mini transfer disk' can only hold 272K, so you may have to strip down the Mac System file considerably – removing fonts and desk accessories – to make the system file fit. Once this is done, you're in business.

HARD FACTS

One of the biggest complaints levelled at the original A-Max was the inability to access hard drives during Mac emulation. For Amiga owners, a hard drive is nothing more than a luxury, but for Mac owners, they're a neccessity. Some larger applications (Quark *XPress* springs to mind) won't even fit on a floppy disk, so you've got to have a hard drive if you wish to run them.

ReadySoft has thankfully remedied this within A-Max II. It's now possible to access hard drives in two different ways. The first (and possibly the best) method is to connect a Mac-formatted SCSI drive directly to the Mac using one of the many SCSI interfaces available. Many hard drives (including Commodore's own) have SCSI interfaces built-in as standard, so fitting a SCSI drive to your Amiga is a fairly simple task. This will allow you to access a hard drive that can also be used on a Macintosh, thus allowing you to share a drive between the Mac and A-Max (although having a Mac defeats the object of owning A-Max in the first place!).

Secondly, A-Max II can now create a Mac-format partition on an Amiga hard drive. Although this will require you to reformat your drive, you can create up to eight Mac partitions, all of which A-Max can access simultaneously.

A-Max II uses custom controller card drivers specifically written for particular makes of hard drive controller. Although the list of available drivers is rather limited at the moment (although all the major brands are supported – CBM, GVP etc), ReadySoft has made available all the information required for third party vendors to produce their own drivers.

SCSI support also extends to allow Mac SCSI peripherals to be used directly from within A-Max. These include such wondrous devices as laser printers, scanners, etc.

WHY DO YOU NEED

"Why on earth should I want to make my Amiga pretend to be a Macintosh?" I hear outraged Amigaphiles around the country cry. Well the truth is, hard as it is to admit, the Mac simply has software which is a damn sight better than anything the Amiga has to offer – and that goes for mundane stuff like word processors and spreadsheets as much as for whizzy multimedia kit.

For a start the Mac can handle colour properly; no messing about with HAM and interlaced modes, the Mac offers 24-bit colour to all who want it, with the latest versions of *QuickDraw*, the Macintosh's graphics system, supporting an incredible 32-bits of colour information. 24-bit colour really puts the Amiga to shame. To get an idea of how many different colours that is, imagine a monitor which changes colour every time the screen is refreshed – that's over 50 times a second. How long do you think it would take to display the entire colour palette? Five minutes? An hour? Try six months; that's a lot of colours.

Where the Amiga does score is in its multi-tasking – the Mac's feeble MultiFinder only allows instant switching between applications, not background running of tasks.

However the main reason for Mac emulation is not the hardware or system software, but the applications. Word processors like Microsoft *Word*, DTPs like Quark *XPress*, graphics software like Adobe *Illustrator* and indefinable software like *HyperCard* is all infinitely superior to the equivalent Amiga software – and costs three times as much to boot.

A nice touch with Mac software is that it's easy to pass data between different applications; a Clipboard and Scrapbook allow text and graphics to be freely swapped between programs.

But to get the Mac in perspective, it's a hell of a lot more expensive than an Amiga, even in its new Classic robes; the software, though excellent, costs a fortune; and you can't play *Shadow of the Beast* on it.

2000 PLUS

For Amiga 1500 users and upwards, ReadySoft is hard at work on a dedicated 'Macintosh on a card' emulator that looks set to be something pretty special. Here's what it has to offer -

INTERNAL FITTING - A-Max II Plus is a plug-in card which connects internally to the Amiga 1500 upwards. At last it's possible to run Mac, PC and Amiga software from a single, self-contained system box.

MAC FORMAT DISKS - With Plus, you can directly read and write to Macintosh format disks from standard Amiga drives.

MIDI COMPATIBILITY - Run such well respected Mac music software titles as *Cubase, Performer* and *Master Tracks Pro* on your Amiga. To take advantage of this facility, you'll need a standard Amiga MIDI interface connected to the serial port.

MAC SERIAL PORTS - Talking of serial ports, Plus provides two Mac compatible serial ports, therefore allowing it to take advantage of Mac serial devices.

APPLETALK COMPATIBILITY - Plus is fully compatible with Mac Appletalk Networks and peripherals. It is now possible to directly connect the Amiga to such devices as Mac laser printers etc.

SOUND IDEA

Also new within A-Max version II is support for Mac digitised sounds. At last you can set A-Max II up to play all those silly sound effects that make using a Mac such fun. Using a desktop accessory called *Sound Master*, it's possible to assign samples to different aspects of Mac operation. Already my A-Max is set up to play a sample of Arnold Schwarzenneger saying 'I'll be back!' when a disk is ejected, Steven Fry saying 'There is nothing to be afraid of' when a damaged disk is inserted, plus the classic Monty Python line 'Ekki Ekki Ekki Puttang shulwulup' when A-Max is closed down .

SCREEN SCENE

On a standard Amiga, A-Max can operate in both medium and high resolution screen modes (although the latter suffers terribly from the problems of interlacing). A-Max II can also take advantage of both the Enhanced Chip Set and big screen monitors such as the Moniterm and A2024 (Commodore's own high resolution mono monitor). However, unless you're lucky enough to own such luxuries, you'll probably end up using A-Max in medium resolution (high resolution hurts too much!).

Obviously the most important factor of any emulator is how well it can emulate. After raiding a friend's Macintosh, I was able to test such packages as Quark *XPress*, *MacWrite*, *MacPaint* and the all important *Tetris*, all of which worked fine. The speed of emulation is also pretty impressive – although screen update can sometimes be a tad slow, programs seem to run at an impressive speed. However, if you've got a processor accelerator fitted to your Amiga, then A-Max II takes full advantage of it, allowing emulation speed to increase by as much as a factor of five!

About the only software that won't work with A-Max are those oh-so clever utilities and games that like to do weird and wonderful things with the Mac hardware. If you try running a program of this type, expect a visit from the old Mac System Error requester (the Mac version of the Amiga Guru!).

To conclude – A-Max was good, but A-Max II is great. ReadySoft has fixed all the problems and answered all the criticisms levelled at the original, turning the A-Max system into a feasible alternative to a real Mac. But just wait until A-Max II Plus arrives! ■

A-MAX INFORMATION

The A-Max II is available Europe-wide from Entertainment International, which can be reached on 0268 541212.

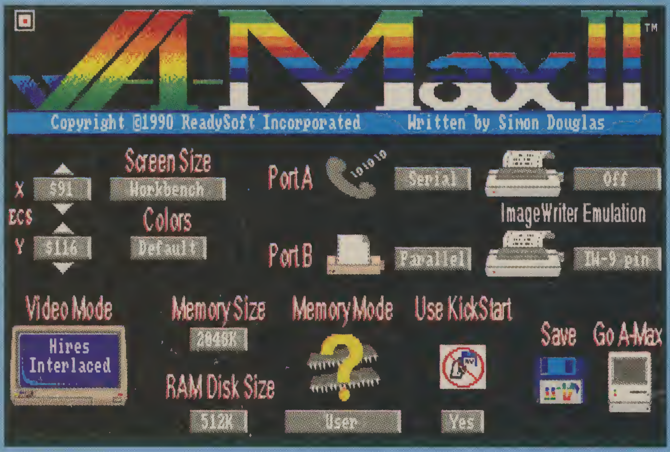
It is priced at £169.95. This includes emulation software, drive software, utility software, hardware cartridge and full documentation.

Designed in principle for semi-professional use it will run 99 per cent of Apple productivity software (including *XPress, PageMaker* etc). If it has a weakness, EI admits, then this is probably in its MIDI uses and in the range of games available to it. But then if you already own an Amiga you don't really need any more games do you?

EI denied it is in any way intended to compete with a full Macintosh. And with the cheapest Mac now available for £550 this would indeed be foolish. Instead, it is hoped the A-Max II will appeal to students and anyone else who would find Mac utilities useful, but not crucial enough to warrant a big spend.

The A-Max II Plus is due out in January at £450. This will feature connections for Apple Talk, allowing networking and other goodies and is to include two Mac serial ports.

GO FROM THIS...

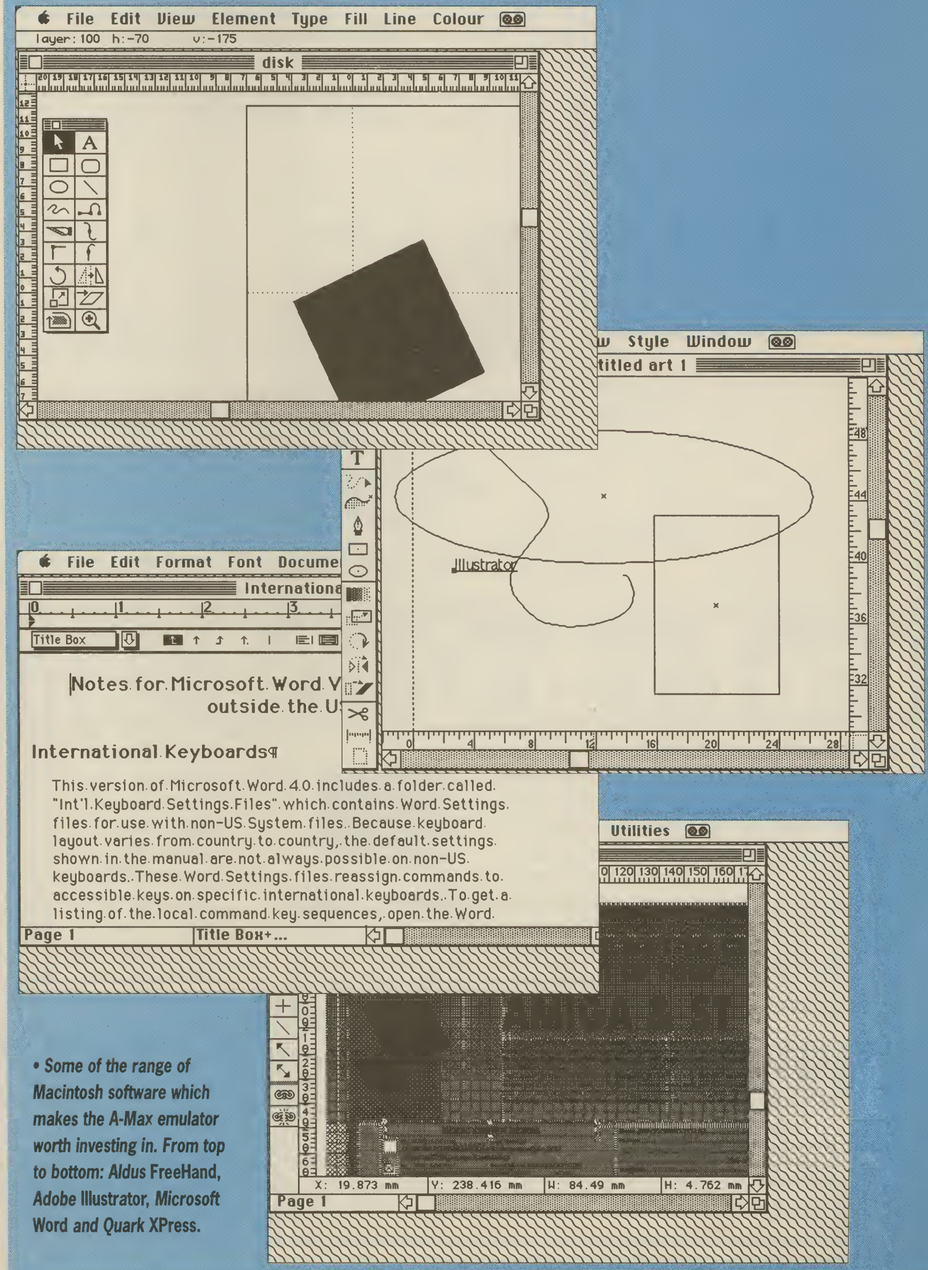


Copyright ©1990 ReadySoft Incorporated Written by Simon Douglas

X $91
ECS
Y $116
Screen Size: Workbench
Colors: Default
Port A: Serial — Off
Port B: Parallel — IW-9 pin
Video Mode: Hires Interlaced
Memory Size: 2048K
RAM Disk Size: 512K
Memory Mode: User
Use KickStart: Yes

• A-Max gives you full control of the screen mode and other variables prior to launching the Mac emulator by clicking on 'Go A-Max'.

...TO THIS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disk
Style Window
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Illustrator
File Edit Format Font Docume
Internationa
Title Box
Utilities
X: 19.873 mm Y: 238.416 mm W: 84.49 mm H: 4.762 mm
Page 1

Notes for Microsoft Word V
outside the U

International Keyboards¶

This version of Microsoft Word 4.0 includes a folder called "Int'l Keyboard Settings Files" which contains Word Settings files for use with non-US System files. Because keyboard layout varies from country to country, the default settings shown in the manual are not always possible on non-US keyboards. These Word Settings files reassign commands to accessible keys on specific international keyboards. To get a listing of the local command key sequences, open the Word

Page 1 Title Box+...

• Some of the range of Macintosh software which makes the A-Max emulator worth investing in. From top to bottom: Aldus FreeHand, Adobe Illustrator, Microsoft Word and Quark XPress.

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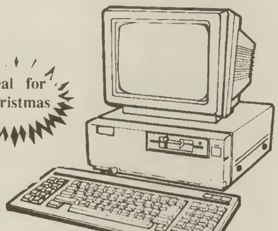

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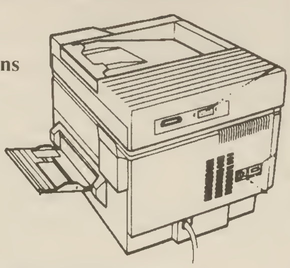

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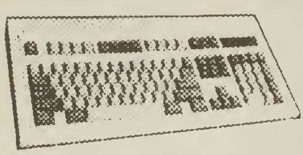

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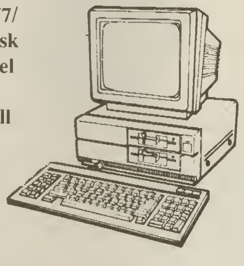

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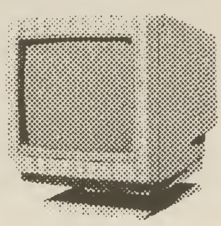

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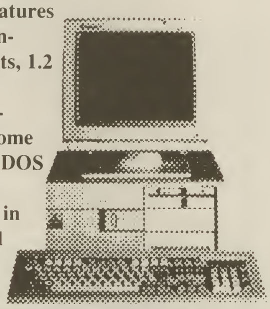

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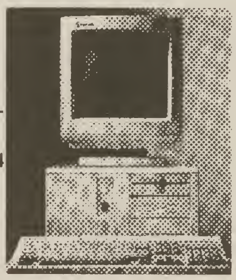

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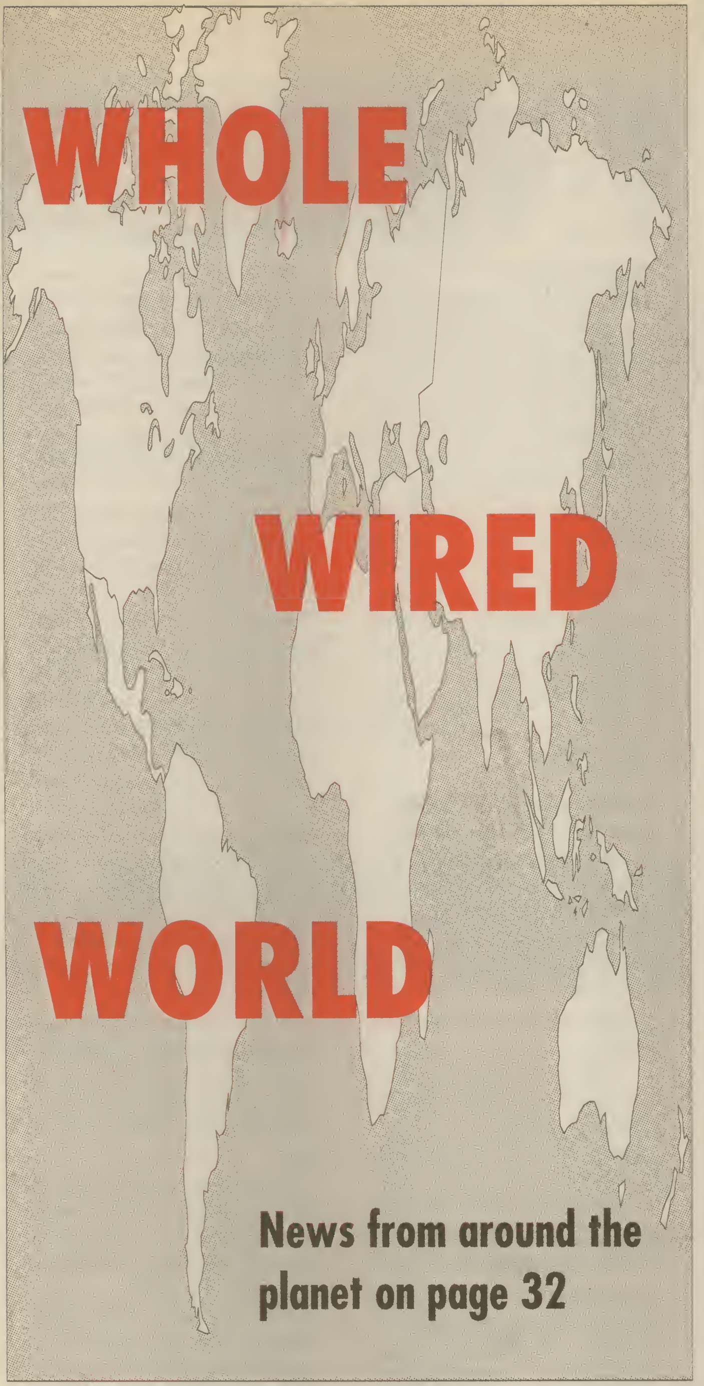

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SOAPY STORY

When you work at home, as I do, lunchtime means only one thing - work stops for my daily dose of *Home & Away* and *Neighbours*. Anyway, to cut a long story short, how many of you have noticed that Commodore Australia is now listed in the credits of *Neighbours*? What form of help Commodore are providing is unclear, but one thing's for sure - I haven't yet seen a single Amiga in the program.

Who knows, perhaps now that Commodore is associated with the popular Australian soap, we'll start to see Des Clarke working out his accounts on an Amiga 3000, or even Jane typing letters on an Commodore C286-LT portable!

NEWSFLASH GOES HOME

Martyn Brown has announced that *Newsflash*, the Amiga's premier disk magazine, will now be handled directly by Newsflash UK. Previously, *Newsflash* was being distributed by several major PD libraries, but Martyn has decided to take on the task of promoting and selling *Newsflash* himself.

If you've never seen *Newsflash*, then you just don't know what you're missing. It's packed with useful programs (most of which are exclusive to *Newsflash*!), gossip, rumour and a fair old helping of humour. For more, give Newsflash a call on 0924 265593. Tell 'em *Express* sent you.

PIPE DREAM

Finding a PD game that looks amazingly like a commercial release is quite a common occurrence these days. The latest game to get the PD treatment is Empire's classic *PipeMania* which has just inspired a PD imitator in the shape of *PipeLine*. *PipeLine* features the same frantic gameplay that made Empire's release such a classic, but for the usual PD price.

The game is available from George Thomson Services on 077082 212 (ask for Fish disk 358).

THE PERFECT WORD PROCESSOR?

Amiga *Protext 5* is finally here, and what a brilliant program it is too! Thanks to those nice people at Arnor, I've been using *Protext 5* to produce all my copy for the last couple of weeks, and I can say without hesitation that I'm very impressed. I've used just about every word processor ever to be released on the Amiga, therefore I feel qualified enough to say that *Protext* is without doubt the best there is. OK, it lacks many of the more cosmetic features of programs such as *Pen Pal* and *ProWrite*, but it more than makes up for these in terms of raw word processing power. After all, if you're a professional writer, all you want to do is get on with the task of writing - all those fancy multi-coloured gadgets and requesters serve only to slow down your work rate.

The new version of *Protext* includes many enhancements over version 4. Here's a quick run-down of what it has to offer:

- Improved User Interface - Intuition support has now been enhanced considerably, making *Protext* faster and much smoother in operation. Many operations such as 'Search & Replace' now have their own requesters. Loading and saving operations can used either the Arp file requester (unofficially recognised as the Amiga standard) or *Protext 5*'s own custom requester (which isn't half bad either). Blocks can be selected by dragging the mouse to highlight an area of text. You can also change the standard text font to any Amiga bitmap font.
- Enhanced Printing - Printing has been speeded up considerably. Also, *Protext* supports multiple fonts of different sizes on the same line, proportional formatting during editing, side margins etc.
- Multiple Files - You can now edit up to 36 files in memory at once. Although no more than two can be viewed simultaneously, you can flick through them quickly and easily.
- Different Languages - You name it, *Protext* supports it. Among the 27 supported are Albanian, French, German, Italian, Dutch, German, English, (I should hope so too!), Welsh and even Serbo-Croatian.
- Index And Contents Generation - Just mark words or phrases as you write them, and *Protext* will automatically create Indexes and Contents lists.
- Spelling Checker - Features completely new 120,000 word Collins dictionary. For foreign users, there are even German and Swedish dictionaries included (with more to come for other languages). Be prepared for 1992 with *Protext 5*!

I must admit that there's still one thing that really bugs me about *Protext* - and that's the lack of support for Amiga custom screens. Perhaps I'm being too picky, but I would have liked to have been able to run *Protext* in a screen totally independent of Workbench. This way, I could switch back to an uncluttered Workbench screen and access the CLI/format a disk/run other programs etc without having to resize the *Protext* window first. OK, memory is already tight on a 1Mb Amiga, but why not at least give users the option? This shouldn't require too much effort on Arnor's part. Anyway, gripes aside, *Protext* is still my number-one choice for a word processor. It's fast, it's powerful, it's featured-packed and it's damned good value for money - what more could you possibly want from a word processor?

For more, give Arnor a call on 0733 368909

SECRETS OF DTV REVEALED

Desktop video is another one of those applications that contains more than its fair share of jargon. Key framing? Composite encoding? Genlocking? - they're all gibberish to most of us! If you feel mystified, then help is at hand with G2 Systems' new instruction video entitled 'Recording Computer Graphics onto Video'.

The video unveils the mysteries of such things as genlocks, coding and colour keying, plus a whole lot more besides.

The video costs £10 and is available from G2 on 0252 737151.

POSTSCRIPT

Is there something lacking in your DTP work? Dot matrix printers are fine for plain text and letters, but not for serious DTP. Compuvision now offers Amiga users a postscript printing service that will print out their work on a high quality laser printer. Just send your *Professional Page* or *PageStream* files to Compuvision on a floppy disk and they will print them out for you. It costs £1.25 per page (although you must order at least 5 pages).

Compuvision also offers a high-resolution scanning service. Send them your artwork and Compuvision will scan it and send you the resulting file in IFF format. Give Compuvision a call on 0642 850759.

Jason Holborn

Archimedes

LIGHT AND SHADE

In the red corner we have Ace Computing's *ArcLight*, another in the *Euclid* series of 3D modelling programs. Scenes created with *Euclid* can now be passed through *ArcLight* to add that extra touch of ray-traced realism to them. The program is fully RISCOS compatible and happily multi-tasks with all other applications, the output image being displayed in a window as it is traced. You can even include a Mogul animation sequence, and all the frames will be calculated and compressed automatically. A huge number of parameters can be changed (some even during a trace) that control such things as cut-off levels for rays, recursion for reflections and the qualities (shine, refractive index, etc.) of the materials used as well as setting the image size and camera position.

I thought that the layout of the parameter menu was a little cluttered - perhaps some of the more esoteric features could have been farmed off into a sub-menu. None the less, some impressive if 'bland' scenes can be produced. Texture mapping is promised in a future release.

Ace is on 0223 322559.

Meanwhile, in the blue corner, the PD raytracer *RayShade*. This is a port of a Unix raytracer and is thus totally non multi-tasking, non RISCOS and non desktop; but then who really cares? It produced some absolutely stunning results. In a similar way to *QRT*, *RayShade* takes its input from a source file that describes the objects that make up the scenes. This is made up from the usual planes, spheres and boxes but includes additional information for texture mapping. Typing '*RayShade -h' gives a brief summary of some of parameters that can be set, these include being able to trace stereo pairs.

I can't reveal much more as I have no actual instructions! A number of example files are supplied from which you could make up your own pictures, but I must say some of the commands look a bit daunting - 14 parameters for a 'surface' command. I think I'll just look at the demo pictures.

A FLIGHT OF FANCY?

In computer games, just as in films and books, the appearance of a sequel is often surrounded by huge quantities of advertising and publicity. Unfortunately the product does not always live up to its hype. Often this is due to the nature of the sequel but sometimes there's simply a rather fundamental problem with the original idea. In my opinion *Interdictor* is a case in point. I never really liked the game to start with, dull scenery and not much gameplay, certainly not much of a feeling of realism. Now the much heralded *Interdictor II* has arrived and quite honestly I feel not much has changed. O.K., there is more ground detail, but only a few rather spindly trees, a few orange lines and a set of roads, the whole game is still set on a very plain plane. How about a few realistic-looking hills and valleys?

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Your mission is at least now slightly interesting, but then again not really very realistic - one plane against the whole of the enemy? What ever happened to good ol' team work! I can see that *Interdictor II* will appeal to some and it is certainly a huge improvement over its predecessor, but it is hardly the best flight simulator ever written; perhaps the forthcoming competition from 4th Dimension's *Chock's Away* will put things in more perspective. All I want is a game on par with *Flight Simulator II* or *Battle Command* on 'other' computers.

JIGSAW JUNIOR

I must apologise for the delay in reporting the existence of *Jiglet* from 4Mation. In essence it is literally a cut-down version of the original *Jigsaw* program, as only 4, 6, 9 or 12 pieces can be used. (*Jigsaw* can cope with up to 120 pieces). In *Jiglet* you can control the shape of the pieces, from simple rectangles to full irregular shapes, with the usual jigsaw bobbles and dents. Visually *Jiglet* is identical to *Jigsaw*, except for the desktop front end which has been considerably improved from *Jigsaw*; buttons now control piece shape, rotation and number instead of the rather arbitrary 'level number'. *Jiglet* gets my approval - I just want a *Jigsaw* version of it!

4Mation is on 0271 45566

THE GOLF CRISIS

After the recent appearance of *Superior Golf*, you may be wondering if the market could really cope with yet another golf game. Well, surprising as it may seem, the answer is yes, the real question is how did we ever put up with all the other versions!

MicroDrive, from Cambridge International Software, is being plugged as a 'golf simulator', but don't be put off, all it means is that it is miles more realistic and fun to play. The main area of improvement is that the ground is no longer flat, indeed some of the holes supplied on the disc are positively Himalayan, with hills, valleys and even split-level greens. Two courses are supplied, but no designer as yet - can you imagine what that would be like! Perhaps the front end is a little tacky, but the quality of game-play more than makes up for that. If you like golf, try *MicroDrive*, I think you'll like it too.

Also from CIS at the moment you can get *Memory Magic*, a rather elementary memory game more suited for children. In the near future, watch out for a version of the board game, *Shanghai*, and a *Rhapsody*-compatible, MIDI drum sequencer.

CIS is on 071-833 4023.

GLOBAL WARMING

It seems that Eclipse's *WorldScape* has been attracting more attention than the authors originally expected. Schools all over the country are eagerly awaiting its arrival. Why the sudden excitement?

Well, Eclipse has been collaborating with both Friends of the Earth and the World Wildlife Fund to turn the product into more of a simulation than a game. It is also likely that a follow up will be produced, aimed more specifically at the education market and further increasing the realism. The current version should be out in early November for the original price of £19.95. What with the recent trend of printing manuals on recycled paper, it's nice to see an ecologically sound piece of software appearing!

Eclipse's less 'green' game, *Blowpipe*, (involving lots of shooting and killing), is finally nearing completion still. Again, an early November release is planned. I've seen a demo version and played it and on the whole I feel it has the edge over *Nevyron*. The music is brill, the sprites good and the end-of-level guardians excellent. Admittedly it's still only a scrolling shoot-'em-up, but its a goody. Watch out for the block-eating puzzle game *The Crunch* coming soon, I've only seen a demo (written in BASIC!) but it seems to have the right appeal. for current trends

Eclipse is also now marketing a joystick interface that plugs into the printer port. Two Atari joysticks can be plugged in and made to emulate keypresses by means of a small relocatable module.

Ken Coumarin

PC

FIRST AMSTRADS SPOTTED!

Reports are starting to come in that the new Amstrads have been sighted in public. Whoopee! It looks as if Amstrad has timed the mass shipping of the machines to perfection – straight after their public unveiling at the Computer Entertainment Show and plenty of shopping weeks before Christmas. And my spies tell me that the ads are starting to appear in the national press. Of course, it'll be a little ironic if the new Plus machines score a huge hit with the first-time buyers, since the basic hardware is now six years old – but the all-new styling and Amstrad's hard marketing push could well pull it off.

More likely, though, is that the Plus models will sell most heavily on the back of the console – either as an upgrade machine for console owners in a few months/years time, or as machines which play the new console games but also allow serious use too.

Many CPC buffs are a bit cheesed off that Amstrad didn't beef up the basic specs for the relaunch – we are talking six-year-old technology, after all. But it could just be that the 'old' CPC fulfilled its function perfectly. How much complexity do you need in a beginner's machine?

Of course, if you wanted to be really cynical you could speculate that if Amstrad made the CPC any better it would damage the sales of the company's bottom-end PCs

PLUS MINUSES?

One nasty piece of news I certainly didn't want to hear is that it looks as if the new 464 Plus will not accept a disk drive. This is a great shame, as it means the new Amstrads will not have the same 'interchangeability' as before. If you want a disk drive machine then you'd better buy one right at the start – as there's no way you will be able to upgrade later on.

Mind you, it doesn't necessarily work both ways. I'm hearing whisperings that a simple hardware mod will allow 6128 Plus owners to load software from tape. The trouble is, it will automatically invalidate the guarantee. I'll bring you more details on that when I have them.

SIM CITY

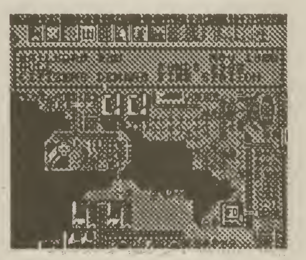
Sim City has been around on the 16-bit machines for ages, and it's such a complex-sounding notion that I never really expected it to materialise on the 8-bit micros. And anyway, it seems like a bit of a 'snobby' 16-bit style game. I mean, building your own city? Bit snooty, eh?

Apart from anything else, you wouldn't really expect it to be that exciting, would you. Ask your average bunch of gamesters what they'd like to spend their time doing, and the construction of municipal office blocks wouldn't really rank too highly, would it? And there are probably more exciting things to do than plan suburban housing developments...

Think again. It must be something to do with a deep, subconscious megalomaniacal urge in all of us, but *Sim City* is extremely addictive.

Your simulated city is built up gradually out of individual building blocks. Your principal job, as mayor, is to allocate building plots to different enterprises. The people who inhabit your landscape must do the rest.

For example, since you start off with a bare, unpopulated landscape you must first of all find somewhere for the people to live. By paying out $100 you can set aside a residential area which people can build houses on. This won't be too popular, though, without any electricity supply, so you'll have to build a power station (expensive). But even though people now have somewhere to live and a power supply, they'll still need something to do. So you'll have to buy an industrial plot, and then a commercial plot for shops, banks and the like and then more houses to supply a work force and then more industry... and so on.



• Hmm – your metropolis is doing quite well. Pity about that earthquake.

As your settlement grows you'll need to think about less essential items – but things important nonetheless in any bustling city. You'll need police and fire departments before long, and sooner or later a sports stadium. And a port and airport will come in pretty handy later on when you want to expand your city still further.

All this development costs money, of course, and this is where the real skill comes in. As mayor you have complete control over the city's purse strings. You set the taxes and you must balance revenue against expenditure, expansion against consolidation.

The citizens themselves can get angry. For example, no-one likes living next to an industrial site, and your unseen population is no exception. Earmark a site for some potentially money-making industry and you may well lose more than you stood to gain by people moving out in their thousands. The same thing happens if you build too many roads in residential areas, or encourage so much industry that your city is immersed in smog.

All that's tough enough to handle, but if you want to test your mayoral skills to the limit, try coping with an earthquake, floods or even monster attack – all options on the Disaster menu which, thankfully, you can switch on or off at will.

From a rather odd initial idea, Infogrames has developed a highly addictive and challenging game. Its real secret is the sense of achievement you get from encouraging countless thousands of people to move into your settlement. Either way, for the price of £9.95 on tape, £14.95 on disk, you're getting a game that'll last you a long, long time.

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RICK DANGEROUS POKE

No, I haven't had any cheats in for *Rick Dangerous II* yet. This one's for the original, and itself excellent, adventuring epic. Got the tape version? Got a Multiface? Then this one's for you:

ADDRESS	POKE	EFFECT
88C3	A7	inf lives
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Rod Lawton

64

TWO DOWN

There's been a mixed response here to the first of the cartridge games for the C64GS now that two of them have arrived. Both *Special Criminal Investigation* (*Chase HQII*) and *Plotting* hark from the Manchester based Ocean, proving that they're not completely hung-up on licences. You can see the power at work in *SCI* right from the moment it's switched on. The dash display across the bottom of the screen uses all the colours it can possibly squeeze in and the instruments are keylined in black for clarity. On top of that, the main action (seen, in third person perspective, i.e. from behind the vehicle you're controlling) zooms along at an incredible glitch-free rate.

The problem with it is in the gameplay. It's fine at first. Every section uses different background colours from the last and the controls respond enough to keep you leaning into the screen. But there's nothing in the way of variety. Every level is nothing more than a more difficult version of the last.

• Not a lot of painstaking forensic inquiry goes on in this one - but lots of brains get spilled

With *Plotting*, it's a different story again. *Plotting* is an arcade puzzle of adequate originality and excellent playability. Disassemble the screens made up of blocks with a bouncing ball fired from one of the walls surrounding the blocks. If it all sounds a little like *Breakout* then please accept the excuse that there isn't space here to elaborate further and that this is a game likely to captivate compulsive puzzle players (especially veterans of *Tetris*). Again, the graphics are impressive and would otherwise consign *Plotting* to the multi-load genre.

Given that Ocean has developed other carts of the likes of *Navy SEALS* and *Batman*, it seems strange that their first two releases should be completely vertical. Perhaps it wasn't planned that way. The word is that *SEALS* is ready but the release is being held back in the light of the film's scheduled appearance date of February '91. As for *Batman*, after its success in its first disk/cassette based incarnation, it may be planning something special for it.

OH, BUCK

The latest in the steadily growing list of collaborations between SSI and TSR comes 64wards from US Gold under the name of *Buck Rogers: Countdown To Doomsday*.

The game format will be familiar to anyone who's tried his hand at one of the *Dragonlance* games. Nested menus, animated graphics windows, special combat screens and tome-like background documentation combine effectively to drop the adventure right into your lap from the first move.But never mind - this is one RPG that races along from one well structured scenario to the next..

RAM

Earth has been laid to waste by the over-exploited plot of over-exploitation and now a mega-corporation from Mars, called RAM, wants to put the place out of its misery by 'sterilising' it, making way for their evil genetic engineering program in the process. Buck Rogers, revived, showered, and with his first change of clothes for five hundred years, has joined an all-inner planets anti-RAM organisation called Neo. It is a party of neophyte Neos whom you must first generate and then play.

Not surprisingly, the whole thing is fully compatible with TSR's recently released (and very successful) RPG, ensuring that characters can be ported into and out of the computer as required by propeller heads. What more could you want?

Sean Masterson

PC

AWKWARD MEMORIES

Few people must use even a fraction of the programs on their hard disk - but they still sit there, using up memory. When a lumbering great beast of an application suddenly gains 40 new features (in one case a program actually boasted of 240 new features) and grows by a megabyte, I tend to react in horror rather than glee.

We're beginning to see what are euphemistically called 'starter products' appearing. These offer the core of the application - the ten per cent of the features required by 90 per cent of the users. The best thing about them is that they come in at a fraction of the price of their heavyweight brethren. I'm currently looking at *LetterPerfect* - half the size and half the price of *WordPerfect 5.1*, easier to use and file compatible - it looks like a winner. I now look forward to reviewing *Half-ard Graphics, Lotus 1-2* and *dBASEd IV*.

On the subject of better things coming in smaller packages it looks as though I'm going to have to bite the bullet on hard disk storage - There just isn't enough of it to go around. One of the major reason for this is the previously mentioned point about the size of applications - nothing seems to install to less than 3Mb these days - I think it must be Marketing Rule No. 5, 'Customers won't take the software seriously if they can install it without having to remove something else first'.

I hit this problem with Digital Research's *Artline* and Corel's *Corel Draw*. Each of these installs to more than 6Mb- without all the clip art libraries. That's 1.5Mb for every £100 of recommended retail price. This ratio seems to be Marketing Rule No. 6. Who on Earth has 12Mb free? I normally run with anything from 1Mb to just a few kilobytes spare for emergencies. Doesn't everyone? Having to delete more than a third of my hard disk brought tears of anguish to my eyes - it'll all go back eventually but in the meantime I feel deprived.

The answer is file compression. Being realistic I don't actually use most of the programs on my hard disk all that often. If I roll the odd directory up into one big file and zap it with a compression routine life will be simpler. I already have the shareware *PKZIP*, though I don't use it. Perhaps I should. I'll try it out and report back on the results soon. There are a few purely commercial programs about that will do the same job. I'd like to hear from anyone who's already using a compression program to save hard disk space - write in and tell me about.

The favourite upgrade for owners of floppy only machines is to a hard disk - a fact that demonstrates just how much good sense PC owners have. A hard disk increases both the ease of use of a PC and its usefulness. Most modern applications (as distinct from utilities) are crippled without one. But what about those who already have one - what are they lusting after; well, apart from that? The answer is usually a better display. Just about everyone without VGA wants it.

A VGA adaptor card comes in at around the £100 mark, but a good colour monitor is crippling (as distinct from an inadequate colour monitor, which won't cripple you but will make your eyes ache). Before you decide the whole exercise is beyond your financial clout take a look at mono VGA monitors. Get your local dealer to show you one running Windows 3 - or whatever. You will be surprised at just how clean and sharp the picture is. A run of the mill colour VGA monitor with barely adequate dot pitch and a screen so curved it looks like a beachball in a box costs about £250. A really sharp, flat, mono VGA monitor comes in at under £100.

SCREEN EMULATIONS

The vexed question of just which PC screen types can emulate which other screen types keeps coming up. Let's sort it out. Of the commons graphic adaptors (which really means the electronics that drive the screen) three are out of IBM and one isn't. IBM introduced CGA (Colour Graphics Adapter), EGA (Enhanced Colour Adapter) and VGA (Virtual Graphics Array – and you thought it would be another adapter). The non IBM graphics adapter is Hercules.

Hercules introduced its card as a replacement for the text only MDA (Monochrome Display Adapter) card. The Hercules card did graphics as well and thus proved very popular – it still is. This is because it provided higher resolution than the others at a fraction of the price – provided you didn't want colour.

Now for emulations. Hercules can be made to emulate CGA – but without the colour – and rather slowly. The best known utility to accomplish this is *CGA2*, available from most shareware catalogues. EGA will emulate CGA (but not Hercules). VGA will emulate CGA and EGA and has top resolution as high as Hercules anyway. No special software is required to do these other emulations – the ability is built in. Now you know.

Steve Patient

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MASTERING WORDS

I know lots of you out there use PCG's three-piece suite of desktop publishing software, because amongst the usual scrawled biro and old typewriter with faint letter P created missives, I keep getting sent beautifully designed letters with different fonts carefully positioned all over the place and arty looking letterheads across the top. Well you can incorporate clip art in your *Wordmaster* DTPed documents, just like those trendy 16-bit owners. In case you're a bit thick, clip art is a collection of pictures covering every conceivable area of interest that you can paste into DTPed pages. And, surprisingly, there's bags of the stuff around for the Spectrum.

Those ever reliable Spectrum types at Garner Designs (57 Lovers Walk, Dunstable, Beds. LU5 4BG.) have a total of 600 piccies on six disks for Plus-3 users and four tapes for 48k/128K owners. What's more, there's apparently loads more to come. Each collection costs £6.95, whether on disk or tape and pictures on offer range from an eyeball to a ladder. Another regular source of excellent quality clip art is *Outlet* (Chezron Software, 605 Loughborough Rd, Birstall, Leicester LE4 4NJ.), the on-screen mag for the Speccy that's received wharehouses of plugs from this column in the past. Each issue has a screen full of pictures that can be incorporated into PCG's DTP software as well as art utilities.

Teachers Pet Software, which specialises in educational programs for the Speccy has also got four batches of clip art available. They're clumped into four collections – animals, cars, people and places and clip, which is a selection of screens that don't fit anywhere else. Each collection is available on tape, Microdrive or +D/Disciple disk for £4.50, includes around 40 examples of clip art and you can get hold of them from 175 Craigton Rd, Aberdeen AB1 7UA.

I've also just seen a load of clip art converted from the ST by Danish Speccy fan Leif Mortenson. In between editing his brill fanzine – *Sinclair Freak'eren* (unfortunately not available to English spec chums) he's converted 228 screen loads of the stuff to the Speccy with loads more to come. Leif is offering all this prime clip art to PCG themselves as well as *Outlet* and the Plus-3 Users Group. He was kind enough to send me printouts of all his clip art and it's the best I've seen for the Spectrum, so let's hope we'll get a chance to snazz up our *Wordmaster* designed pages with it soon.

FREE PD

There's now a public domain library library. Ashley Price (11 Spences Court, 58 Spences Lane, Lewes, East Sussex.) has just set up a service which will apparently provide people with a full list of PD libraries for the Spectrum for the price of an SAE. I'm not sure if there are enough around to make this viable but if your a PD head librarian and don't mind the "small" fee for registration contact Ashley at the above address.

Incidentally Ashley also told me in a right-on, non-sexist fashion that he, 'admires the Miktor, s/he certainly knows his/her Spectrum games.' Something we all agree with, I'm sure.

EGO TRIP

Fancy yourself as a computer journo? Between you me, it's a bit of a cushy number. I ask because a fanzine called *Spec News* has got loads of situations vacant that they want to fill with the cream of Spectrum specialists undoubtedly reading this.

They're looking for people to write about adventures, music and games, as well as pen features for each issue of their tape mag. I would tell you what the latest issue was like only it refused to load (send me another copy!) but if my memory serves me correctly, *Spec News* is an enthusiastic mag pitched along the same sort of jape-filled lines as *Your Sinclair*.

Would-be contributors should get in touch with Chris Kelly at Imprint Publications, 192 North Home Rd, Cirencester, Glos GL7 1DX. Don't expect to get any financial reward apart from the ego-inflating thrill of seeing your name in pixels.

MINUS MIKTOR

M A Harris, alias the much revered Miktor, hasn't sent in any pokes this week. He offered the following cheat for *Midnight Resistance* instead.

"Redefine keys and when asked OK Y/N? quickly (And I mean QUICKLY) type I AM AN OCEAN GAMES TESTER. If you're not quick enough the keys will redefine so try again. You should now end up with a cheat menu. If you select 'weapon' you need ammo as well.

To select a weapon play the game and then press [FIRE], [DOWN], [BACKPACK] and tap [SPACE].

Old MA also gave me a bit of information that might come in handy for anyone contemplating using his excellent Plus-3/Plus-2A utility, *Ghost*, which has appeared in this column and *Your Sinclair*.

"You may have had a few complaints from Plus-3 owners saying that they couldn't load anything. Well, depending on the quality/speed of your tape, you may need to POKE 1512,X. X is a number between five and ten, it starts at seven. Although I say 5-10 some tape recorders are so bad you may need higher numbers Any number up to about 20 might be worth trying (0 is the slowest and you won't get anywhere with it.) This shouldn't pose a problem if the game uses it's own loader."

Another hearty helping of thanks to MA!!

Got any hints, cheats, pokes, news or anything else Speccy-related you think I should know about? If so send 'em to *New Computer Express*, 30 Monmouth St, Bath BA1 2BW. Ta.

Robin Alway

ST

ST DESKTOP

Yeah, sure the ST's Desktop is OK. It's certainly better than the blank A-prompt that the majority of PC-contemptibles display, and it's certainly friendlier than expecting you to type in messages like, er, COPY *.* A: B: (cough, cough, displaying very rusty PC-contemptible knowledge here – after all, it's years since I had to do without icons and a mouse, thank God).

And yet... And yet, it's hardly being disloyal to the ST to admit that Atari has let the desktop get a little long in the tooth without improving it sufficiently. Even my nice shiny 1040STE is still lacking in quite a few obvious areas. (The thing that really really gets my goat is how, if you move an icon slightly within a folder, it assumes you want to transfer the file to the same place it was before. Aaarggh!)

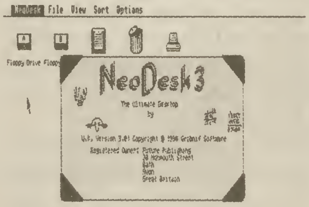
(No doubt Atari has a very good reason for this, though I'm hardly inspired by Steve Gold's report of the explanation offered for minor bugs in the latest version of TOS. Apparently there was a bit of a hurry to get it finished one afternoon and one or two wee bugs crept in. Very reassuring, I must say!)

I wrote a couple of weeks ago about the TT's terrifically user-friendly interface, and no doubt eventually many of its better points will "trickle down" to us mere ST owners. But that's still a long time away.

Thus it is with some considerable excitement that I tore open a package ordered from GST and containing, I rightly guessed, *NeoDesk 3*. Having spent a good few hours testing it out thoroughly (OK, OK, playing about with it) however, I must admit that quite frankly I'm...

Absolutely delighted. It's tremendous. It does all kinds of things that are a Godsend to anyone who uses their ST for anything more than playing games. You can, for instance, automate any series of desktop operations such as opening windows, copying and deleting files, executing programs and assign them to any key on a keyboard.

You can replace commands with keyboard shortcuts for speedy operations. You can access, again with an assigned key for extra speed, programs, files and folders from the *NeoDesk* desktop. You can store files and folders temporarily on the clipboard while changing floppy disks or reorganising your hard disk, should you be lucky enough to own one.



• *The ultimate desktop. And you'd better believe it.*

You can write important notes, and even recover that vitally important file that you were sure was the older version, by dragging it back from the recoverable trashcan.

And, if you wish, you can also redesign and modify custom icons, specify colours and fill patterns; import *Degas* or *NeoChrome* pictures as backdrops; and carry out smart file and disk copying. In a word, brilliant.

There is, however, one thing worrying me. Either I'm doing something daft, or it's impossible to load the latest version of *Protext*, one of the ST's most popular word processors, from within *NeoDesk 3*. This is, I hope, a quirk associated with that program alone, though knowing the Arnor gang I doubt that they've been doing anything illegal or unusual.

Anyway, the two-disk *NeoDesk 3*, which includes an excellent 130-page manual is an absolutely wonderful creation and will cost just £39.95 from GST, which can be reached on the following telephone number: 0480 496789.

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GO FOR IT – ATONCE

If you are obliged to sit in front of the aforementioned despised PC-contemptible at work, you might want to carry on working when you get home. But don't go out and buy a second computer just for that reason. Instead, use your ST.

But, I hear you splutter, but. But nothing: use a PC emulator. Use ATonce, for instance, which has just had an upgrade to Version 3, which includes 'task switching' – in other words, you can run up to eight PC applications at once.

Normally ATonce would cost you £199. As part of this column's service, however, I'm about to tell you how someone will give you a tenner to take ATonce.

Blimey! Of course, there is a catch, of kinds. You need to be in the market for a hard drive, and prepared to go for a really good one. To be precise, you need to shell out £579 for the Vortex 40Mb Datajet, and you need to be buying from Full Circle Technologies, which can be called on 0622 677173.

LOOK OUT FOR CHRISTMAS

Oh no, not that. Anything but the dreaded exmuss. Still, with Atari approaching its most important Xmas ever, the ST is once again well poised to make its way into thousands of new homes, for not only is it the wonderful machine you've come to know and love so well, it's also the "entry-level" (ie cheapest) 16-bit machine.

Everyone, except, apparently, Atari, knows that the STE fiasco, when the upgrade ST was discovered to be incapable of running a goodly proportion of older software, put a serious blight on last year's festivities. That situation has more or less sorted itself out, though the STE has not exactly been snowed under with new software taking advantage of its capabilities.

Now is the time for Atari to really push the ST as the great machine it is. With a little marketing flair, a big push and a lot of investment, this could yet be the Christmas we look back on as the time Atari turned the corner.

YOU REALLY SEND ME

Haven't you ever wanted to send faxes via your ST? You haven't? Oh, well you'd better skip this story and go onto the next one.

Ladbroke Computing is selling, for £190, a widget that enables you to send faxes, though not receive them, using your ST. The modem is fully Hayes-compatible, has auto dial/answer and speeds up to 2400 baud.

Call Ladbroke Computing on 0772 203166.

NEW CITIZEN PRINTER

Citizen has just launched the 124D, a new printer that offers 120 character per second in draft-mode and is claimed to be the lowest priced 24-pin on the market. Its recommended retail price is £320.

Call Citizen on 0895 72621 for details of your nearest stockist.

NOTHING BUT GOOD NEWS

Three companies about whom I've had unsolicited letters commending their service in the past week or two: the ST Club (0602 410241) and Mike Goodman Public Domain Library (0782 335650) both offer an excellent public domain service, with extras.

And I'm glad to see that many people have followed my recommendation and bought the £39.95 *TCB Tracker*, a superb four channel synthesizer, drum machine and mixing studio from MPH (0603 503382).

I have two copies of this excellent software to give away to the author's of the best letters published in this column over the next month.

So whatever you feel like saying, whether you wish to recount some particularly excellent (or execrable) service; tell me your feelings on the recent Atari 'Whistle Stop Tour': whether you wish to congratulate Atari for the excellent way it runs its business, or merely wish to expatiate on the aerodynamics of pork, write to Steve Carey's ST Column, *New Computer Express* 30 Monmouth St, Bath BA1 2BW.

Steve Carey

Macintosh

MAC-LITERATE

To help new Mac users get over the preliminary barriers of almost complete lack of knowledge and experience there are various guides available. So below, I've detailed a couple of these that should help you to get to know your INITs from your CDEVs, etc.

THE LITTLE MAC BOOK

This is a 100-page book written by American Robin Williams. Subtitled 'An Informal Guide', it's a perfect book for the complete Macintosh novice – starting from defining basic computer terms like 'K', 'Meg', 'RAM' etc. Chapters then introduce concepts like folders, windows, applications, the desktop, desk accessories and so on.

The only quibble that I have with this book is its sometimes appalling style. It's written in an American 'accent', which sometimes becomes extremely grating. But if you can cope with prose like "If you have lost files, do read about Mr Find File on page 81. He'll go get them for you," and you've never used a Macintosh before, then this could well be the book for you. It costs £13.95 and should be available from most good bookshops. If you can't find it, give Headway Computer Products a ring, on 0252 333575. For the more retentive amongst you, the book's ISBN is 0 938151 21 5.

THE MACINTOSH BIBLE

For more advanced readers *The Macintosh Bible* is an absolute must. The second edition of the book has over 700 pages of information, arranged into chapters starting with general principles, moving through fonts, printers and utilities and finishing up with tips on using commercial packages for things like word processing, graphics and page layout.

Information in the chapters is organised into stand-alone pieces consisting of two or three paragraphs, each group with its own icon – a burning match for a 'very hot tip', a hand with the thumb down for a 'very bad feature' and so on.

The Macintosh Bible: Second Edition is edited by Arthur Naiman, priced at £24.95, and available from bookshops or from Headway (phone number as above). The ISBN of this one, in case you're wondering, is 0 940235 01 3. The enlarged version is out in November

USEFUL UTILITIES

Here are a few free and ShareWare utilities which no Macintosh user should be without.

*Init cdev 3.0.*This is a utility which controls which INITs are loaded when you start up your Mac. If you plan to try out different INITs it's vital that you have a program like this. It's distributed, free, under the HappiWare system

SuperClock! 3.9. is another freebie, this program puts a digital clock on the right-hand side of your menu-bar. The font that the clock is displayed in, the format of the time and date and whether to have it chime or not are all configurable via the control panel.

Disinfectant 2.2. Mentioned in my first column, it's since been upgraded to version 2.2. Every Mac user really should have some form of anti-virus protection. *Disinfectant* is totally free and is available from user groups, bulletin boards and normal public domain software sources.

SCSIProbe 2.03. Only really of use if you have a CD-ROM player or a removable hard disk attached to your Macintosh via the SCSI port. The program scans the port and allows you to mount devices which are there but haven't appeared on the desktop. It appears as a control panel document and, once again, it's free.

For Mac PD software, try Translatum International. Its address is (wait for it) Saithaelwyd Ucha, Carmel, Holywell, Clwyd CH8 8NU. Tel 0352 710276. It has a wide range of PD and ShareWare stuff for the Mac, including the whole *Educorp* range. I'll be looking at other PD sources in future weeks.

BARGAIN CITY

If you can't really afford a Classic, or you want a machine that's slightly faster but can't afford the LC, then don't despair. The arrival of new machines has meant that the second-hand value of older machines has plummeted. Around £700 has been lopped off the price of an SE 2/40, for instance, which now goes for around £900. So for the same price as a Classic 2/40, you could pick up an SE – which is faster and as reliable. The guarantee may have expired, but for many people the savings will still outweigh the risks

Keep an eye out for second-hand Mac Pluses. These should start to sell on the second-hand market for silly prices – with the base-level Classic costing £575, the owner of an unexpanded Plus can't expect to get more than about £200-£300.A bargain.

There are a few things that you should look out for. Firstly, examine the top of the case, where the front and back sections are joined. If it's damaged, it probably means that someone has taken the case off without using the special tool; ask yourself why they may have wanted to do that.

Next, look at the screen. Check to see if you can see a faint image – where the screen has been left on with a static image displayed for a long time. If the image is very faint, you may well be able to live with it – but check.

Ask to see the Mac initialise (format) a floppy disk. If it fails, be wary: the disk heads may be out of alignment, or the drive may be damaged in some way, both of which could cost you a fortune to have repaired. Once the Mac has formatted a disk, ask to see it run a variety of software – if possible, take some of your own. If the heads are out of alignment, it won't be able to read disks formatted on another machine.

Remember to check all the obvious things with the owner: Has it ever needed repairs? Was it new when they bought it? How old is it?. Etc.

Finally, before you buy, try to get some kind of guarantee that if it needs repairs within a couple of weeks of you purchasing it, you'll get a refund.

Ian Wrigley

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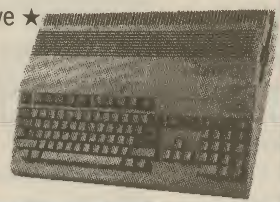

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IF YOU ARE THINKING OF BUYING AN ATARI STE THEN READ THIS FIRST !

Atari have now confirmed that all future shipments of Atari STE computers will no–longer have the sockets allowing simple expansion using plug–in SIMM memory modules. The new design will involve de–soldering existing RAM and soldering directly to the PCB any new RAM expansions (thus invalidating your warranty) – thats the bad news. The good news is – We were the FIRST dealer in the country to discover this and we instantly secured a large stock of the last remaining easily upgradable machines in the UK. There will be no more. We are offering these machines with and without expanded memory etc (see below). As an added bonus, Atari have also confirmed that all new shipments of STE computers will have the new DMA chip set. This will enable trouble free operation of Atari hard disk drives. Until now there have been some machines which have caused problems with Atari hard disk drives (see NCE Issue 102 page 9). REMEMBER – ONCE STOCKS OF THESE MACHINES HAVE GONE THERE WILL BE NO FURTHER STE COMPUTERS WHICH CAN BE EASILY UPGRADED WITHOUT AFFECTING YOUR WARRANTY. WHICH MEANS BUYING A 4 MEGABYTE MACHINE "OFF THE SHELF" WILL MEAN BUYING A MEGA 4 ST (WITHOUT THE STE FEATURES) AT OVER £1000 !! ***RING TODAY FOR FURTHER DETAILS***

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WHOLE WIRED WORLD

A regular trip around the world with Steve Gold.

ELIE KENAN RESIGNS FROM ATARI

The big news from across the Atlantic is that Elie Kenan – the big cheese from Atari France, drafted in a few months ago to Atari's North American operations to assume the role of US and Canadian general manager – has returned to his native France.

As this edition of WWW goes to press, reports are still somewhat garbled, with Atari staffers claiming that Kenan has returned to France for a big Atari show there. Both *ST Report* and *Z-Net*, the two major US on-line newsletters, however, say that Kenan left Atari US rather hurriedly after a meeting with Atari's Jack Tramiel.

According to *Z-Net*, Kenan had been looking at relocating Atari's US headquarters to Boston, presumably in an effort to save money, but was overruled by Tramiel.

Whatever actually happened – and ST users are unlikely to discover the real events – Kenan's departure comes as a body blow to the US Atari community, especially since it was only a week ago that he was to be found at Atari ST shows discussing the future of Atari.

Kenan's place is taken by Greg Pratt, a long-timer with Atari in the company's finance department, who ran the ill-fated Federated Store group in the latter stages of it being wound up as an Atari operation. Although widely regarded as a competent replacement to Kenan, most in the on-line ST community admit he lacks Kenan's charisma and reputation.

HIGH-CAPACITY DISKS

Verbatim has begun shipping the industry's first 3.5-inch floppy disks capable of storing up to 4Mb of data using conventional drive technology. The slight snag is that they cost $15 each and are sold in boxes of ten for $149.95. They can also be used as conventional floppy disks, although that's like throwing money down the drain.

ATARI TAIWAN CHARGED WITH SOFTWARE PIRACY

Atari's Taiwan subsidiary has been charged with allegedly using pirated copies of common software programs, according to the UPI news wire. The charges were handed out after a court-ordered search of Atari Taiwan's premises in April of this year.

According to informed sources, Taiwanese officials discovered what appeared to be unauthorised copies of Ashton-Tate's *dBase III Plus* and *Lotus 1-2-3* during the search. Atari subsequently claimed that the programs were being used by two of its staff without any knowledge on the part of senior company officials.

I'm inclined to believe this story since I know of several companies I myself could walk into and 'discover' unauthorised copies of business programs. It's interesting to note that Taiwanese officials chose to prosecute Atari Taiwan rather than sort the matter out amicably.

For its part, Atari Taiwan says that the Taiwanese government has blown the case up out of all proportion, as less than a dozen pirate copies of programs were actually involved.

"Being a computer company, we are very sensitive to the software community," said August Liguori, vice president of finance with Atari, "we fight this kind of piracy all the time. It would be foolish for us to cheat our own peers over a few hundred dollars."

WINDOWS FOR COMDEX

Commodore has revealed that Amiga Unix – its port of AT&T Unix System V version 4.0 – is being beta-tested in universities around the world and that X-Windows is being ported to the Amiga Unix and Amiga DOS operating system environments.

X-Windows is a graphical user interface (GUI) front-end that is used in many Unix applications. The X-Windows port is reportedly being beta-tested by educational establishments in the US, Canada and the Netherlands.

Commodore has also formally announced the A2410 graphics card for the A2000 Amiga and up. The card, which has a resolution of 1,024 by 1,024 pixels, can display up to 256 colours out of a 16 million colour palette. This colour resolution – not seen before on the Amiga – is made possible by the use of the TI 34010 graphics co-processor which speeds up the Amiga's display. Although no new Amigas are expected from Commodore at next month's Comdex Fall computer show in Las Vegas, these new goodies should form the mainstay of the Commodore Amiga show at Comdex on November 12

SENTRY BEGINS SHIPPING

Dave Beckemeyer of BDT has announced that *Hard Disk Sentry* for the Atari ST has begun shipping. The $49.95 package is a hard disk utility system that, as well as optimising, verifying and de-fragmenting ST disks at high speed, also handles partitions in excess of 16Mb. Like Gazelle's *Optune* package for the PC, *Hard Disk Sentry* uses an intelligent system of de-fragmentation, only deleting the original file clusters once the cluster data has been written and verified to another part of the hard disk. So even if the power fails in the middle of a program run, absolutely no data is lost from the ST's hard disk.

BDT Incorporated, PO Box 21575, Oakland, California CA 94260, United States. Tel: 010-1-415-530-9637.

FUJITSU FOLLOWS POQET

Fujitsu has just announced the release of a 2.2-pound pocket notebook computer called the FM R-Card. The unit comes with a tiny 'scrabble key' keyboard and an 80 x 25 line screen. It is fully MS-DOS compatible. If that specification sounds like the Poqet computer, launched earlier this year in the US and subsequently in the UK, it's because Fujitsu has a 58 per cent stake in Poqet – hence the similarity between the two machines.

The FM R-card PC will go on sale next January in Japan for just under $2,000 – that's cheaper than the official Poqet variety, but don't rush out to buy one just yet, as the Fujitsu unit uses a unique computing standard that is not actually IBM-compatible. Fujitsu says it doesn't plan to market the machine overseas, although Poqet might try and-introduce a similar model in the US that will be IBM-compatible. Remember to watch this space.

ROW OVER TT SOFTWARE

A row appears to be brewing over Atari's decision to limit the software available in its new desktop package for the new TT series, which uses a ROM-based version of the software.

This effectively limits the new desktop to the TT, unless some genius hacks the software and ports it to disk. Which is exactly what one unknown pirate has done, with the result that the TT desktop software is now circulating like wildfire among the American ST community. Atari has no plans to do the same thing officially, so ST users are turning to the pirate copies to obtain the benefits of the TT desktop. A crazy situation and one that cannot enhance Atari's reputation amongst the user base. ■

Virtual Impact

• *Strangled at birth. The Atari TT - will its software development be left to the hackers?*

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OPENING TIME

The name is Moseley, Ken Moseley and I'm back. For those of you who have not made my acquaintance, I am from the North and I know what I think. Let's get a few more things straight; I am being paid a large sum of money to cover for that arrogant, soft southern, middle-classed, upstart (he's not even 40 yet) Tim Smith to write his Centrefold. Since I have been away computer journalism has sunk below that of a rattlesnake's toenails in the bargain basement of a Co-op down a mineshaft.

All you read nowadays is free advertising for the hardware and software firms. The reason for this? Hacks get free trips, free T-shirts, free software and free alcohol.

This is the case all over Europe and the States. Even the Reds are beginning to follow this line. Having been in Tehran for the last year or so I was refreshed by the rather more pure level of journalism expressed in magazines. If a hack writes something his (*or her – let's let the punters know this is a non-sexist mag, please – sub*) readers don't like then it's off with his (*or her – sub*) hand. That's what I call editorial policy. Say what you like about Islam, it gets things done. They have grit, guts and above all else respect for authority. If only there was more of this in this once great country of ours!

Some of you may also be aware of the fact that I am currently residing in cyberspace. The reason for this is that is a new, young land which has not yet been affected by the ravages of modern living. There are no criminals in cyberspace, there are no charlatans, no mountebanks, no nancy boys, no hard faced women and no whinging students. I will defend this brave new world from these people with flame throwers, anti-personnel mines, Napalm and any other weapon which comes my way.

Don't misunderstand me, I am not saying that people should not be free to express themselves, but sooner or later this leads to anarchy and discontent. The only way to deal with this is to drag the malocontents out into the middle of Salford rubgy league ground, tie their limbs to four stout cart horses, read them their rights and yell "giddy up!". I thank you.

Tim Smith's CENT

Write to 30 Monmouth Street, Bath BA1 2BW (if you dare)

DESPATCHES

Each week The Centrefold brings you a glimpse at the big scene, the world scene. This week's heavily edited report comes from our man in Katmandu. It's Harley McDavis the legendary programmer of such games as Elf's Sortee, Merlin's Mirthful Merry-Go-Round of Madness, Goblin's Quest (the series), The Journeys of Asolgorth, and The Court of Losely Locket. Harley has been living in Katmandu since Asolgarth hit the top of the Albanian software charts and stayed there for six years.

• Despicable scenes of degradation at a Katmandu programmer's convention.

It's alright man, don't worry about it. Life's good babe. The latest issue of *Mondo 2000* has just got here and it's wild. Anyway right, where was I? Oh yeaaaaah! There is so much hardware here that your brain would be fried like an oyster on a pewter plate in Death Valley really.

Fr'ixample, there is a monk who lives around the corner on top of this pole where he's been for 6 years. He's got an Amiga 3000 and a huge long lead. He's programming his mantra into a speech simulation program. The idea being that he can concentrate on pole sitting and reading the Rubayatt while the computer does the boring stuff – he used to be a management consultant from Leeds until he jacked into a 15 minute relaxation program which over ran by two days. Wild or what!

There also an MSX user group in the suburbs. They're a bit crazy, but they're alright. Their plan is to subvert all other computers by loading every network with Z80A code. Once all the other users have been hypnotised by, and I quote "the beautious cohersion of the Z80's vibe" they will unleash the 100,000 spare MSX units they have stored up (yes that's where they all go) on the world at £23 each. For more information call Katmandu 83838-89383838 [voice].

That's about it for now, man. Please send the bread in US dollars for convenience and try not to psyche-out the readers with your aggressive waves. Before I go, I have to tell you about this new piece of software for the ST, Amiga, PC, CPC, PCW, Oric, Mac and Lynx. It's called *RoachWorks* and is a TSR program (the packaging's really useful as well) in the mode of *SideKick*. It comes with a biorhythmic alarm clock to warn you against bad periods, a notepad which is compatible with touch sensitive screens, and it is compatible with the Grateful Dead, Stone Roses, Rolling Stones and 13th Floor Elevators records. The cost is $129.95.

For more information call Digital Retards on Katmandu 918329-39309280928-33. Stay wild and love to the readers, man.

THE BLEEDING CHARTS

After much whinging by the erstwhile author of this piece of... prose one reader was irritated enough to send in his chart of his All Time Top 10 software. And here it comes. This week from Sean MacRae of Hammersmith. This is an all time top ten by the way.

1) *Pet Invaders* (c 1976) Invaders the size of houses
2) *BASIC Games* & *More BASIC Games* by D Ahl.
3) *Ghost Town* (c 1981) Totally addictive and forgotten
4) *3D Monster Maze & Mazgogs* (c 1981) Scary stuff
5) *The Hobbit* (c 1982) Speccie game, bug ridden,
6) *Defender and Scramble* (c 1982) BBC micro. Near perfect arcade conversions
7) *Wizardry* (c 1983) Apple II. The best RPG around
8) *Elite* (c 1985) BBC B. Nuff said?
9) *Populous* (c 1989) best 16-bit.
10) *Dungeon Master* (c. 1985) Supadupa smashing fantastic your money's safe.

Can't argue with that can we? No.

QUICK QUIZ SPECIAL

WIN *POWERMONGER* from Electronic arts!

This week's Quick Quiz is a tricky one for all of us. Smith left it behind before he took his limo *(don't you mean pushbike?– sub)* to the airport. The idea is that The Centrefold is to have a cartoon strip in the new year. Smith, being the little pinko he is, wants it to be a really interactive 'graphic story'. He wants the following questions answered. The prize is a copy of *Powermonger* , the brilliant game from Electronic Arts in which you get to control a planet. As I say, the idea of a cartoon strip designed by readers strikes me as being open to abuse. It also strikes me as being a ' Russki designed by a committee' idea which is bound for failure, but Smith wants your input. Whatever happened to benign dictatorships? At least they got the motorways running on time. Anyway, the questions:

1) Should the major character be

A) A human
B) A computer
C) An animal
D) Your idea...

2) What should he/she or it be called?

3) Where should the cartoon be set?

4) How long should it be?

A) 1 frame
B) 2 frames
C) 5 frames

5) What should the cartoon be called?

6) Should The Centrefold have a cartoon at all?

The final question concerns the story-line of the first three episodes. This a supplementary question – but if your idea is chosen you will paid £15. Send your entries to 'Charlie Brown Eat Your Heart Out Comp' The Centrefold, *New Computer Express*, 30 Monmouth St, Bath, Avon BA1 2BW.

TREFOLD

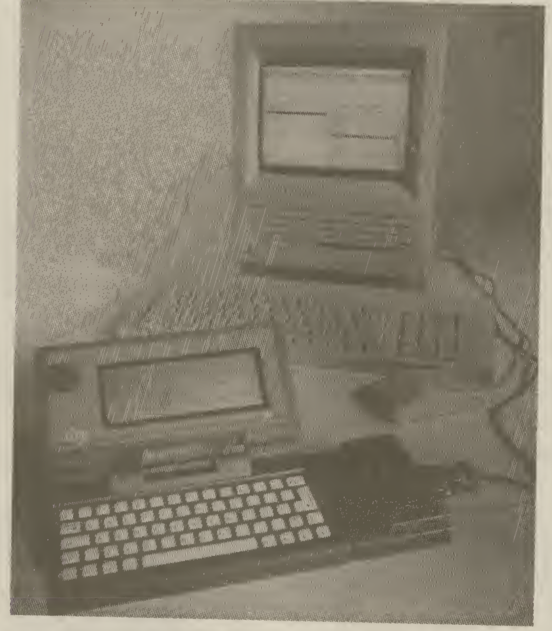
THE TOSH TEN

For once this chart will be readable and witty. None of those wimpy whinging little Ten Ways to Look Good with a computer, anyone with a computer looks good. No more Ten Films based on computers. This chart is Ten Ways to Deal with Someone Attempting to Tamper with Your Micro:

1) Reason with them while looking down with barrel of a Mauser.
2) Explain that they are morally, ethically and legally in the wrong
3) Wipe your disk box clean with their hair
4) Make it clear that, if they had asked permission, you would still prefer to see a deranged shark fiddling with your keyboard.
5) Plug their wedding tackle into the joystick port and then play *Rick Dangerous.*
6) Take them to the Celtic end at an old firm match and tell them to sing the national anthem while waving a union jack.
7) Report them to FAST
8) Report them to MOSSAD, the CIA, the KGB and me
9) Take them into the street, flay them with a wide carriage printer and then hack off their feet
10) Allow them to continue tampering while you brick up the room

CAPTION FULL STRENGTH

Even I found this picture stupid. What does this man think he is up to then eh? How did he end up in his present position? How can he get out of it? I have been authorised to put up a prize for the person who comes up with what is thought to be a funny caption. Do remember to tell us what machine you use and what disk format it is otherwise we'll send you any old bucket of tosh.



URGENT ANNOUNCEMENT

Readers should be aware that shortly after writing his Tosh Ten, Mr Moseley was forcibly removed from the *Express* offices. He was beginning to rave in an uncontrolable manner about the decline of the force of law, religion and organised programming session. Unhappily he was still connected to his Brain Booster Cyberspace Sensory Sock-'em-Senseless Machine. The *New Computer Express* team must sadly announce that Ken Moseley is dead.

Or at least so far into Cyberspace that only a concerted effort by a team of highly trained freaks could rescue him. Gawd bless him and save him.

I WISH I'D SAID THAT

Have you read or heard anything which made you reassess your views of the computer world and the wasters who populate it? Get back at them by writing into I Wish I'd Said That at the usual Centrefold address.

This week there's more drivel from the mouths and pages of people who really should know a great deal better by now.

"Well no the copy we sent you for review isn't quite finished yet. There will be sound and there will be better collision detection. But couldn't you give it a few hundred words for now?"
An unnamed software house PR person.

"What's wrong with viruses anyway?"
Overheard at a recent large show at Earl's Court

"It's at Kensington Olympia"
Tim Smith about a recent large show, at Earl's Court.

FROM THE ARCHIVE

Contrary to popular opinion, nostalgia is not a negative, weak characteristic of man. It is a healthy desire to reflect on the good old days when things were rosier, southerners were not under your feet all the time and only people who knew how to use computers were allowed to have them. What was happening a year ago this week? Read on.

LATE EXTRA
The Konix console (not even a true computer, but what does that seem to matter in this so-called magazine?) was late. It would not appear until Christmas. All this on top of the fact that a large cash injection had been made into the company.

ATARI ARESHIRTY
Atari reacted badly to criticisms of its STE machine. "We're furious and you can print that." was the opinion of one Atari spokesman of the mauling which the micro had taken. One programmer, Wayne Smithson of Blood Money fame, commented "The blitter is pretty useless... there's no barrel shift of any sort." Another, Les Player ex-Atari, said "Atari hyped it long before it arrived and that was always going to be a problem." On the positive side, Jez San who had a hand in one of my favourites, Starglider, said "...it's a step in the right direction. Still at the same price as a 1040 you can't complain." and Jeff Minter commented "If I get one I'll try and get the best out of it. I wouldn't mind using the hardware scrolling just because it's there, but that's not really very commercially viable."

NASA-T VIRUS
Anti-nuclear protesters were said to have inserted a virus into NASA's computer network. This was in opposition to the nuclear powered space shuttle project. The virus was called Fu Manchu and managed to infiltrate the computers controlling the data capture from the shuttle's voyages.

DOWN IN FLAMES
Poor old Firebird was due for the chop from MicroProse. Firebird had been bought from British Telecom earlier in the year and was to be binned in a reshuffle.

CHINA IN YOUR HAND
The Red Chinese were losing whole hoards of cash due to their failure to keep up with skilled hackers and such like. In a country that big there were only 50,000 computers and most were basic (that was probably the nearest they came to an operating system as well!). It seems that because the machines were so primitive, they could not stand up to even a fairly skilled hacker.

A NICE GAME OF SOOTY
An old *Express* favourite appeared for the first time (sub that sentence because of mixed tenses and I'll tear your lungs out) *(anything you say Mr Moseley – sub)*. Sooty was seen playing a computer in an episode of the cult series called The Good, the Bear and the Fluffy. Mr Matthew didn't like this turn of events thinking that it would turn the bear into an addict. The sour-faced old F**t won out because at the end of the program the crew ended up outside playing other games.

CHIP CRIME CHAOS CANES CALIFORNIA
Gangs of thieves were reported to have been raiding warehouses in attempts to steal computer chips. It makes you wonder what sort of parents these people have! My God, software theft is bad enough, but this is beyond the pale. These people should be publicly flogged, hung, drawn and quartered with rusty knives and then made to sing the National Anthem.

RIDLEY, ILLITERATE REVELATION
Emma Nicholson, that gorgeously correct MP said this of the hapless Nick Ridley when asked why the anti-hacking bill was being held up. "He is taking the issue far too calmly for my liking. But he's not computer literate so he can't be expected to understand." I hate to see in-fighting between such people.

CYBERSPACE – AN EXPLANATION

Many people have read these pages and have written in to ask why terms such as Cyberspace, William Gibson, Jacking in, and virtual reality are bandied about with such abandon. The reason is that the upstart wishes to appear hip. I, Count Moseley, have been to these places and I've sampled the joys. So here is a glossary of terms for computing modern like.

1) WILLIAM GIBSON. Gibson is an author whose works include *Count Zero, Neuromancer, Burning Chrome,* and *Mona Lisa Overdrive*. A typical Gibson phrase is as follows: "He fumbled in his back-pack for a cigarette and his simple reflection hologram" or "She wore only a bloodstained WIMOTEC overcoat and touched the button on her recon satellite comptroller". No one knows what he's talking about most of the time but he's alright by me.

2) VIRTUAL REALITY Not to be confused with delirium tremens. This is a term coined to explain computer generated environments.

3) JACKING-IN: A term used often in Gibson books to explain the process whereby a human being accesses a Virtual Reality environment or an area of Cyberspace. In the new world, people will be physically connected to their micros by jack plugs.

4) CYBERSPACE: Synonymous with Virtual Reality. An area of imagination and computer generated reality.

5) TIMBERLANDS: A type of boot (*which Smithee claims he has, but the whole world knows they're fakes – sub*).

6) MONDO 2000: An American magazine devoted to things new age and cyber (see *Express* 97).

That's about it for now. I hope this has been useful to you in trying to make sense of the upstart's rantings.

Letter Spray

Want to see your name in print? Then write to Centrefold. This week's replies by Ken Moseley

Right, here I am – a new broom. There will be none of that penny-any slanging which makes up the bulk of Smith's replies. You will not read any clever-cleverness just straight talking and good sense.

Dear Tim,

Firstly, the grovelling bit to put you in a good mood and hand out a brilliant piece of software or a nice widget for my Mega ST.

Now it's the cutting time. I feel I must take umbrage at the attitude you displayed to your contributors in Centrefold 101. In fact your attitude made me sic *(sic)*. I refer of course to the way you derided every mistake the contributors made whether grammatical, punctuational – look it up – or spelling.

You obviously consider yourself the cat's whiskers, naturally gifted, witty and literate. I edit a monthly magazine and also consider myself gifted, witty and literate. I depend very much on contributions and although frequently mis-spelt, and poorly constructed, with help from me they can be transformed into interesting and readable articles for my readers. I would certainly never criticise their writing ability as you do.

Why don't you direct your Tippex-tipped sabre at your colleagues instead or yourself. May I quote from page 41 of Issue 100, column three, paragraph two: "A reader, who's name and address I don't have...."? The word, Smiffy, is whose, so send me *Calamus* and the laser printer, go eat a bowl of doggy-doos and I remain, Yours

Andy Davies, Bideford, Devon.

Andy,

Thanks for the letter. I happen to know that you edit the very smart North Sports and Classic Car Club *magazine and so you know what you're talking about. Give people their say, that's my opinion. However, grammar is important and people should abide by the rules. If they don't apply by the rules then where are we? The problem lies not with the writers* (I'm not so sure about that – sub), *but with the educational establishment and the appalling quality of most spelling checkers.*

Hi,

Being a born again pervert (I had a week off whilst visiting my grandmother) I have decided to write and complain about the letter sent in by TP O'Reilly (issue 102).

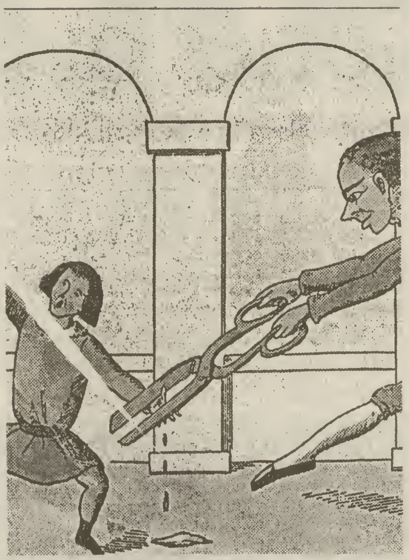
I find his self-righteous views extremely insulting and I am disgusted with your magazine for subjecting me to such degrading material. I found the picture of the two young ladies extremely tasteful, so much so that I now have a 6 foot blow-up of it on my bedroom ceiling.

If you continue to print such dribble, I shall discontinue purchasing *NCE* and I am sure that other readers will follow my example.

Yours leeringly, Dave Stanforth, Gwynedd, Wales.

Dear Dave,

The letter you refer to came from someone who believes in his faith, is not quite yet a computer user and stands by what he thinks. I say more power to him. We need more people of Mr O'Reilly's ilk in this country. I find your childish views - and not even one mention of a computer – pathetic. You and Mr Tim Smith –Smith probably have a great deal in common but I stand by TP. Now shut up.



• *How to turn a 10-bit into an 8-Bit. Dealing with perverts is never easey as this early press release shows*

Dear Mr Smithy,

I was deeply shocked to read in issue 102 that you associate with Haydn Fitz-Williams. I, a victim of this butcher of reader's correspondence, feel that is is my moral duty to warn you of this monster's sinister malpractice inside *Express*' Mailbag pages.

I sent in two letters which were butchered and changed. He then also failed to respond to a letter I wrote to *NCE* about this naughty deed.

This is why I write to you dear brave Mr Smith. To expose this monster, what he does and to warn would-be writers to *Express* while HFW lurks within its depths. Lest there be anymore victims such as myself.

HFW must be a member of the dirty Mac brigade as he is always bragging about his Mac IIfx. No answer or response inside the magazine within 3 issues following 102 will result in the tearing up of my subscription, a refund in unmailed issues and no more reading *NCE* again.

Yours an angry, very unsatisfied intellectual from the superior county of Tyne and Wear.

Dear Intellectual,

I will have you know that Haydn and I have been in this industry for more years than you could count. He was the last pupil to have passed through the much-missed grammar school system. A man with 11-Plus and honours. As a long-time systems analyst for you-know-who, Haydn has every right to cut any letter he wishes. I wouldn't imagine that Smith would agree with me here, but that's your hard luck. I will not stand for people criticising a man of such warmth and wit as HFW. And finally, what do you expect? If your letters are too long they will be cut. Think yourself lucky that you even got a look in.

THE OUT OF TOWN TOP TEN

For some reason it is thought that getting into the far distant reaches of this country is a good thing to do. This week The Centrefold goes further... into Scotland. This week it comes from Dundee's Bits and Bytes store, featured in *Express* 102. The shop is run by 17-year-old Scott Mclaren. Paul Varney is also there and they're both stout fellows. Call the shop on 0382 22052. or go and see them at 131 Marketgate, Dundee, Scotland. They're new, fresh and let you try the games out in the shop.

TOP 10 16-Bit

1) *Kick Off* still in there, still good.
2) *F19 Stealth Fighter* neaaw, daka-daka but more quietly
3) *Cadaver* 3D isometrics, kicking and Paul's fave.
4) *International Soccer Challenge* the World Cup lives on
5) *Lost Patrol* I've been to Nam... Cheltenham.
6) *Fire and Forget* Cars, guns and mayhem.
7) *Midwinter* up three places from issue 102.
8) *Finest Hour* Indeed yes, more daka-daka Ginger!
9) *Dragons of Flame* Dragons flying, diving and er....
10) *Populous* 16-bit classic

TOP 10 8-Bits

1) *Addidas Championship Football* name's too long to comment
2) *Dragons of Flame* up a massive six places from issue 102
3) *Ghostbusters II* Bill Murray as a weirdo with spooks
4) *E-Motion* less of a way of life, more of a great game
5) *World Cup 90* Can Scotland win this time?
6) *Turrican* Extreme violence and good fun
7) *Shadow Warriors* Hiehhhhh, thwack and splatter
8) *Klax* New in to the Out of Town chart
9) *Back the Future 11* Down 3 from issue 102 but still humming
10) *Flimbo's Quest* From the school of cute

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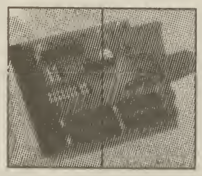

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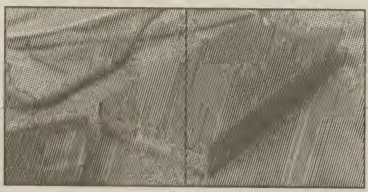

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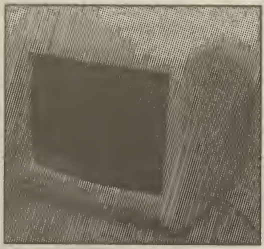

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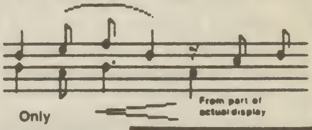

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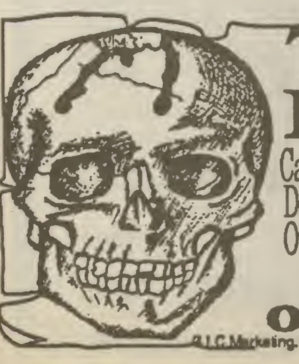

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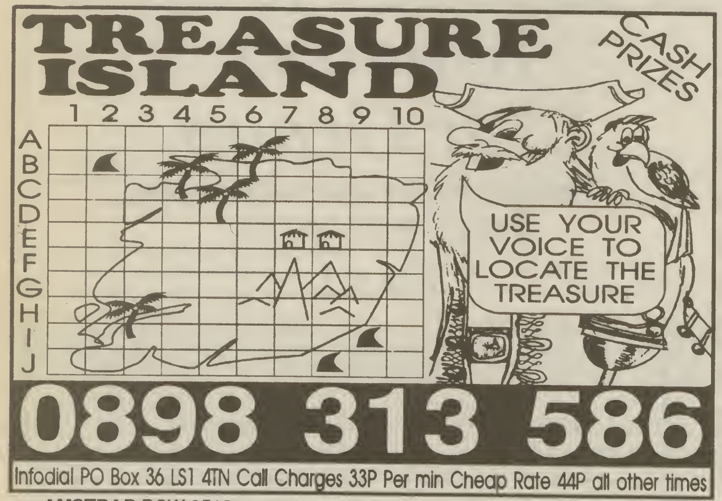
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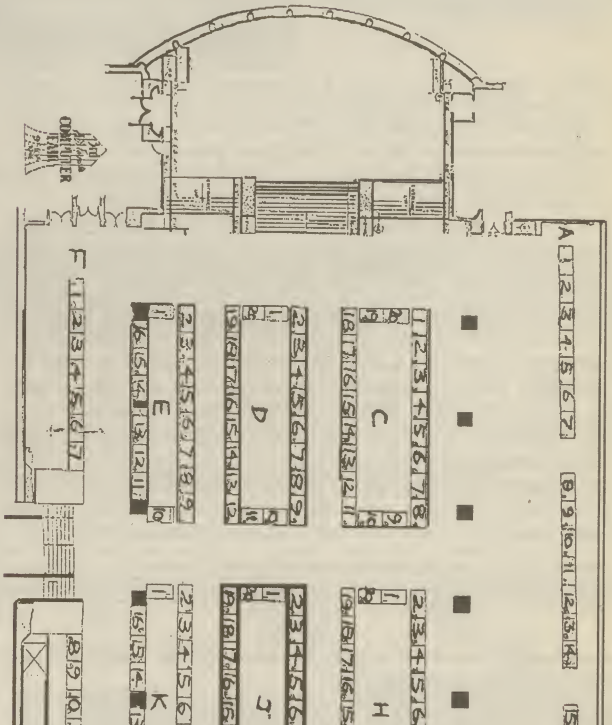

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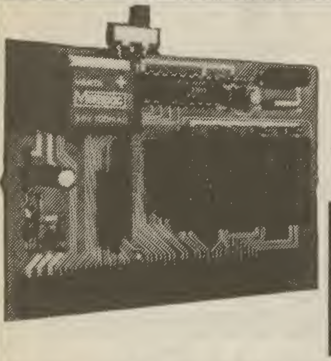

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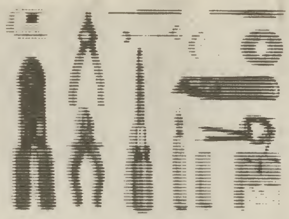


Build a PC, add a chip, change a monitor. It all costs money. This week Keith Pomfret targets the DIY market to see what's there, what problems you could come across and how much you can save.

Saving money by DIY when upgrading or buying a machine is a veritable minefield only attempted by the computer buffs and wirehead literates.

With savings from a couple of pounds on a chip to many hundreds of pounds on a full system, more people are turning to the advertisements that offer self build systems and add-ons for a fraction of the retail cost.

DIY PC

There are a couple of ways of getting a full component PC cheaply. Many companies advertise full system kits, some offer add ons and peripherals and the discerning buyer can usually upgrade or build a system a lot more cheaply.

While it isn't generally as difficult as those plastic kits that never looked as good as the artwork on the box, it certainly requires a steady hand and a disciplined approach.

Most PCs are fastened together with screws, nuts, bolts and those infuriating springy things that spring off and hide in the carpet until you vacuum.

FROM SCRATCH

Whatever you buy, make sure that there are comprehensive and concise instructions. If dip switches or ambiguous connectors are involved there should be clear instructions on their use and function. There can be nothing worse than having all the components assembled, but not working because of a switch or connector.

If you're starting from a bare case and building up a board at a time, you can save yourself a lot of time and grief by testing as you build. For example, you install the power supply on the main board and then test it by powering up. If the power comes on, all's well and good. If it doesn't, or it flicks on then off, there could be a problem. Working this way and testing as you add each component, you can isolate any problem as it occurs.

When you attach components to expansion slots on PCBs, make sure that the edge connectors are clean before inserting the card or component. Many a faulty card has turned out to be a gunged up connector. Attaching motherboards to chassis or cases must be done carefully. The motherboard is a large PCB and you must be careful not to allow it to flex when you're handling it as this can break tracks or dry joints.

When fastening the motherboard to the machine or any other substantial components or boards to the machine, check that the process of fastening things together doesn't cause anything to be held in a permanently bent or twisted aspect.

There should be no bare connectors, wires or clips in a position where they can brush on metal components or cause any circuit to be made that is not intended.

Follow this advice and the instructions and you'll have a cost effective computer in about the time it takes to watch a couple of episodes of it.

ADDING THE BITS

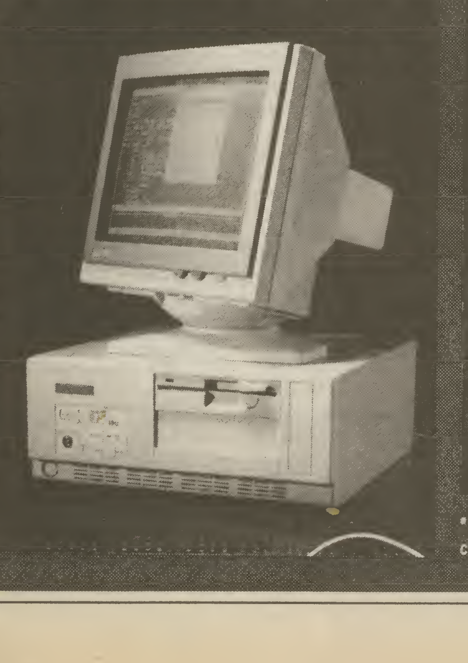
If you have a non standard PC such as the Amstrad 1512/1640 or 8086/286/386 series, check that the parts, cards or peripherals that you are planning are compatible. The best thing to do before you order any component from any supplier is describe the make, model, configuration and set up of your PC to the supplier and assert firmly that the products you buy must be compatible fully with your hardware.

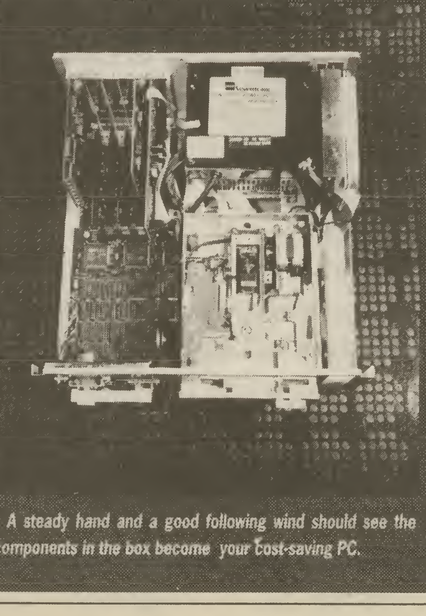
Before you rip your beloved machine to bits, check that it is out of guarantee (you may void any warranty) and that you're competent. If the answer to either is no, you can either 1) get a competent dealer to do the work or 2) carry on and sod the consequences, fiscal or safety wise. The latter is a crazy route unless you can afford to burn money, fingers and life.

If you're adding a monitor or drive, check that your machine can drive it. If it can't, you may need a new display card or disk controller. Some of the simplest add-ons are only a couple of minute jobs, but be wary of a large project like replacing the motherboard. It can be undertaken by an intelligent and dextrous person but you may find that the new board may not want to fit or may have its fastenings in the wrong place.

A competent DIYer shouldn't have any problems, but it won't always be simple. Remember, never add anything that hasn't been certified as OK for your machine and configuration. ■

TRANSFORM A PILE OF COMPONENTS INTO A PC!





• A steady hand and a good following wind should see the components in the box become your cost-saving PC.

THE CASE STUDY

I wrote a shopping list for an AT spec machine with a single floppy, but specified that it must be upgradeable to multi-format floppy and hard drive. The machine was to be used for office tasks such as word processing and databases, etc and the ambient lighting conditions demanded a display with VGA high resolution and a low perceived albedo. 1 Mb of RAM was desirable.

Communications software and possible connection to a printer had to be catered for. The occasional game might find its way on to the system, so some sort of games port was needed.

The imaginary publisher gave me an imaginary cheque for £1,000 and I picked up the 'phone to talk to Christine Barrow at the Chip Shop. My imaginary £1,000 didn't include VAT so I could go to £1,150. I explained my needs and Chris did a swift calculation.

"You can have that for £757.82," she said. Plus VAT made £870ish. "No," she responded. £757.82 included VAT. That left enough cash to buy the wife an imaginary fun fur coat to avoid the "You've been out and spent more cash on a computer" argument.

The system was:
D109 Desk Case
80286-10/12 main board with 1Mb RAM on board.
Hard/floppy disk controller (2 hard/2 floppy any size.)
VGA card
Multi I/O card (2 serial/ 1 parallel and a games port)
1.44Mb 3.5 -inch floppy disk
VGA mono monitor (amber)
Enhanced 102 UK keyboard
Total cost including VAT £757.82

As well as offering the parts to construct the PC I was offered constructive advice on the assembly and troubleshooting.

The CHIP SHOP is on 061-476 3070 and supplies everything from a tidgy DRAM chip to a full spec office computer system.

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APPLE SYSTEMS. Irene Flaxman, Apple 2000, PO Box 3, Liverpool L21 8PY. Was named BASUG. Local groups, newsletter, BBS.

APPLE II USERS. Join Apple 2000, The national user group, with monthly publications, bulletin boards, local groups, meetings, problem helpline and more. Ring 051 9284142 for details

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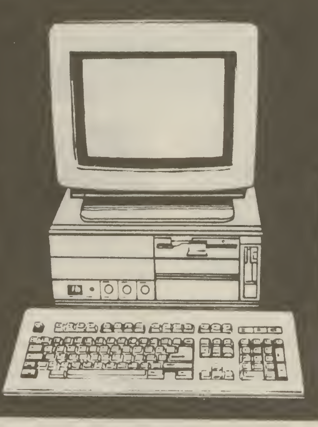

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THE PD COLUMN

There's a wealth of free software out there which is yours for the price of a disk. Our PD man, Adam Waring, takes a look at what wonderful freebies are on offer this week...

Mouse Pointer • ST • Softville PD • ACC69

Fed up with the same boring old mouse pointers? You've got to admit it: those arrow and bee pointers are getting a bit long in the tooth.

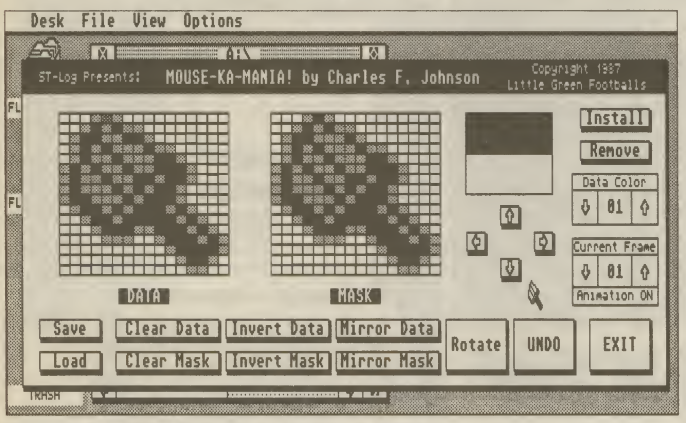
Well, now you can use your artistic talents to design your very own personalised pointers. Your art program disk can have a paintbrush to do the pointing and clicking. And you can select files from your games disk with a little space invader. What could be more fun?

Mouse Pointer allows you to create the pointer you've always dreamed of. It runs as a desk accessory, so whenever you feel in the mood for a little redesigning, it's only a click away.

The icons are drawn on a 16 by 16 grid. The individual pixels can be switched on and off to build up the image. A number of options are also available to do clever tricks, such as mirroring and rotating the sprites and so forth. You can even create animated pointers to jazz them up even further.

Fifty or so pre-defined pointers are already included in the package. They fortunately vary enormously, covering virtually every conceivable subject under the sun, and therefore makes quite a sensible and useful start. So even if your artistic ability is strictly limited you've plenty to choose from to get you going.

Also on the same disk comes a great little program called *Retrace*. This little beauty records all the mouse and keyboard actions, and re-traces them at a time of your choosing. It 'remembers' everything that happens under the GEM environment, and then quite simply plays the actions back to you as though you were doing them all over again. Spooky...



• Redesign those mice with the amazing new mouse pointer.

Quickdisk • ST • Softville PD • ACC79

Quickdisk is a compilation of utilities with one very important thing in common: They're all prefixed with the letter Q, just to be clever.

Qfind is a program for those of you who know you've got a program lurking somewhere on your disk, but aren't sure exactly where. It works in a similar way to the Find File option found on Apple Macintoshes.

Just type in the name of the program that you want to find, and *Qfind* searches through all the directories and sub-directories, displaying every occurrence of that file. If your memory is so hopeless that you can't even remember the name of the file then all is not lost. Wildcards can be used, so it's an easy matter to look for all files on your disk starting with the letter Q, for instance.

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Another way to use the wildcard feature is to find all desk accessories say, by searching for *.ACC. Hey presto, every file with that extension is shown.

It cuts down hunting for those elusive files dramatically. Normally you'd have to click on every single folder individually until you've found it and even then it's an easy matter to overlook the file you're so desperately searching for. You'd be right back where you started.

The program has far more uses than that though. You can guard all your favorite files from prying eyes by hiding them. Just don't forget what they're called or where they are!

Have you ever felt that your ST's performance isn't all it should be? Well don't despair! There exists a program called *Qindex* that will tell you just how healthy your machine is. It performs a series of diagnostic tests on your beloved machine, and gives it to you straight at the end of the therapy session for you to deal with.

Tests are carried out on the speed of the hardware and GEM routines. The results are compared against an index of how the average ST should be performing in a perfect world. The ratings are given as a percentage of this projected figure. As you would expect, 100per cent is the norm. Any higher and your ST is obviously souped up in some way. Lower and it's not pulling its weight in the department in question.

Qlabel allows you to design up to ten labels at once. No fancy graphics are involved, you can just label your disks quickly and clearly. It should make your disk collection a lot tidier.

The ST is a pretty nifty computer, being sixteen bits 'n' all, but sometimes it could do with an extra kick of speed. *QuickST* does just that. It's like a turbo charger for your ST, and is installed as a desktop accessory.

It works by replacing parts of the TOS operating system. Much of TOS is written in C, a compiled language. Unfortunately, although C is fast, it isn't a patch on pure machine code.

QuickST on the other hand is pure machine code and it goes like the clappers. It doesn't actually do anything different than TOS, it just does it faster. The optimise code is designed to speed up scrolling, text output and windows. The version supplied on the disk handles both mono and medium resolution colour machines, but if you pay out the shareware fee (and you should) you get even faster and smaller, custom designed versions for your particular type of display.

Qview makes viewing text files a doddle. Although it is always possible to use the 'show' icon when reading .DOC files it's a cumbersome method, as you can only read through it as it comes up on screen. This program lets you scroll through the text in a much easier way.

The cursor keys scroll the information one line at a time. To leisurely flip by a page at a time, it's simply a case of pressing shift simultaneously.

So there you have it. A whole bundle of mega-useful utilities, all beginning with Q. What more could you ask for?

Cool Fridge • Amiga • Amiganuts • Disk 765

Upfront is a demo-making group which has recently started producing its wares on the Amiga. If its first effort is anything to go by, then we'll be seeing some really impressive stuff from these guys.

It's a demo in several parts. Each part is very different from the previous one, so in effect you get seven individual programs for the price of one.

The opening screen features that uniquely unreadable scrolly text that we know and love and which makes demos demos. I (wisely) gave up trying to decipher what it was supposed to be saying, before my headache got any worse. Instead I impatiently launched straight into the first proper part of the program.

It was called *Smooth Plasma*. It consists of a simple white line of text which scrolls un-ostentatiously across the screen. It does nothing fancy like bouncing around and turning itself inside out. Instead it just scrolled smoothly. When the excitement of all this abates, what really knocks your socks off is the background. What a background. Sheets of the most amazing colours twist and turn all over the screen. It's almost hypnotizing to watch. I was quite unwilling to turn it off and load something else.

But I did anyway. The other six are all astounding in their own little way, but in my opinion, none are quite as effective as *Smooth Plasma*. I loved it and so will you. ■

WHERE TO GO

Softville Computer Supplies, Unit 5, Stratfield Park, Elettra Avenue, Waterville, Hants PO7 7XN. Telephone 0705 266509. The Softies supply PD for ST owners all over the globe. Up to nine disks will cost you £2.50 each. Ten or more you'll pay £2 per disk. If your part of the globe is outside the UK then just add 10% to the total price to cover the exorbitant expense of overseas mailing.

Amiganuts United, 169 Dale Valley Road, Hollybrook, Southampton SO1 6QX. Telephone 0703 785680. Nuts about your Amiga? Then call Amiganuts a library that caters for the Amiga, and the Amiga only. Got that everyone? Disks start at a modest £1.50.

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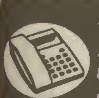

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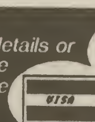

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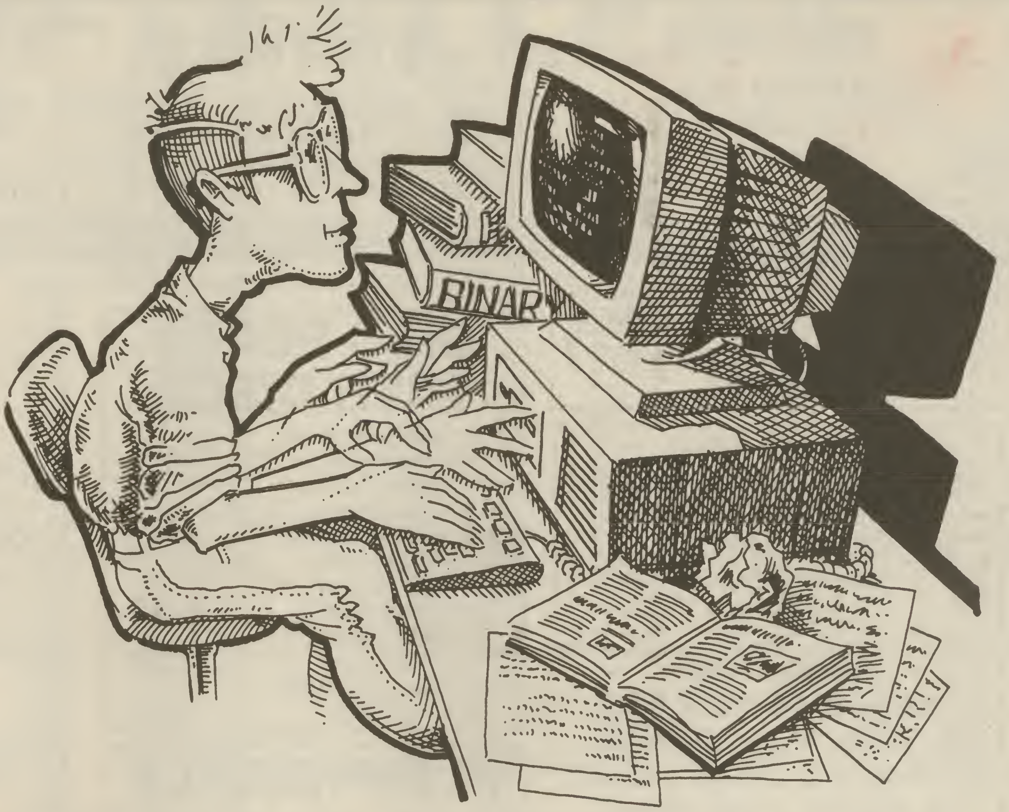
NCE NOVEMBER

As of next week Express will be running a regular weekly column on programming and its mysteries. This week we look at some of the topics which will shortly become clear to you. A quick Lisp anyone?



THE INDUCTION PROGRAM

We all need programs – our machines simply wouldn't work without them – but few of us actually take up the challenge and get programming. Which is a bit of a shame; programming is an intellectual puzzle of the best kind – you are not 100 per cent sure there *is* a solution to your problem – and of course you can end up with some useful software to boot.

Programming really isn't as hard as it's made out to be. Once the jargon barrier has been broken it doesn't take a mathematical genius to produce a serviceable program, and you quickly realise that there are many pieces of 'commercial' software you could do yourself quite easily!

To help you make your way through the minefield of learning programming *Express* is starting a series of articles designed to make everything become clear. We don't claim that if you read the next 26 issues of *Express* you'll be a fully fledged programmer, but you will have a firm grasp on the principles involved, and with plenty of practice you should be able to turn out a respectable piece of software.

So what will we be covering? Next week we'll take a look at the fundamental principles of programming and give you a head start in understanding some of the jargon involved. Then in the following weeks we'll be looking at:

- Prototyping
- Programming style
- Choosing an algorithm
- Notation
- Pseudocode
- Program layout and documentation
- CASE
- Structured programming
- Object-oriented programming
- Debugging
- Optimising
- Porting code and writing for different architectures
- Arrays and data structures
- List processing and sorting
- Recursion
- Variables
- Graphics programming
- Modelling
- Languages, including C, Pascal, Modula 2, Assembler, BASIC, Prolog, Lisp, and C++

Phew! If you understood all those terms, you don't need to bother with the programming series. If you missed a couple, then turn to this page next week when Mary Branscombe, who was with *Program Now* prior to joining us here at Future Towers, will make a start on the big wide world of programming. ■

MAKE A CHEAP START IN THE PROGRAMMING JUNGLE

You need a programming language before you can start programming. It sounds a bit obvious, but it's true. Most 8-bits come with a programming language built in, their 16-bit cousins will need to load a disk with the language first.

The most common language is BASIC. It's supplied free with most micros – the exact version depending on the machine. For instance most PCs come with GW-BASIC or BASICA, while an Archimedes comes with BASIC V and an ST with Atari BASIC.

If you want to get more adventurous the place to go first of all is a public domain library. Turn to the Public Domain Column on page 58 or have a delve into the advertisements to pick up some names and addresses, but any library worth its salt should be able to let you have a PC version of C or one of the other compiled languages for the price of a disk. It's vital to get one with good documentation – all the programming theory in the world won't tell you if you need inverted commas around a variable in a particular dialect of a language!

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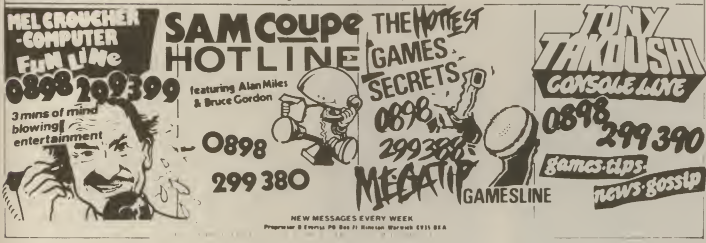
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MARK HIGHAM'S GAMES WEEK

LAST
NINJA 2
BACK WITH A VENGEANCE

A BIT OF A MIXUP?

Take an old game, add a few sprites, change music and improve playability then re-release it all over again. Sounds like a good money-making idea to me. System 3, renowned for its ninja games, recently announced that it would be producing the *Ninja Remix*. On the 8-bits this game is really a re-write of *Last Ninja 2* with some major enhancements. The music has been remixed, animated sequences introduce each level and the playing area has been increased.

ST and Amiga owners are also to be treated to their own version of the Ninja Remix but in the case of the 16-bits, this will be a completely brand new game.

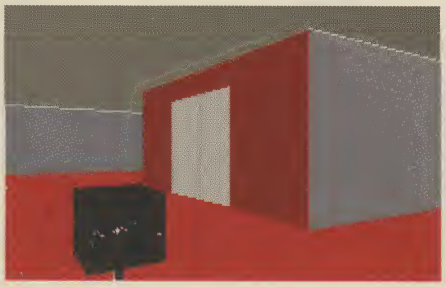
In *Ninja Remix* you go to the island of Lin Fen to avenge your brother's murder. The island is divided into six regions and each one offers you the chance to use your fists, feet and any other part of your anatomy going spare, to turn Kunitoki's henchmen into writhing scum. Part of the challenge comes in finding a route through the treacherous landscape. The six levels take you through wastelands, wilderness, dungeons, the palace and the inner sanctum.

8-bit versions of *Ninja Remix* will be ready by the time you read this with cassette versions retailing for £9.99 and disk formats selling for £14.99. The ST and Amiga versions of *Ninja Remix* will be available at the beginning of December, selling for £24.99.

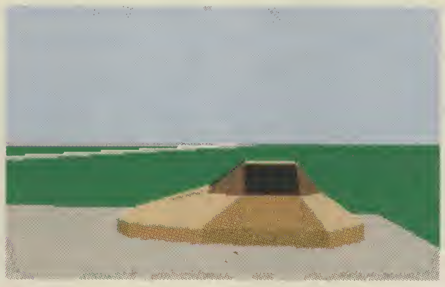
PLAYING TIPS: a tour to Damocles

Is this the shortest ever solution to *Damocles?* Alastair Webb from Hants believes it is. His helpful tip enables you to save both Eris and Damocles.

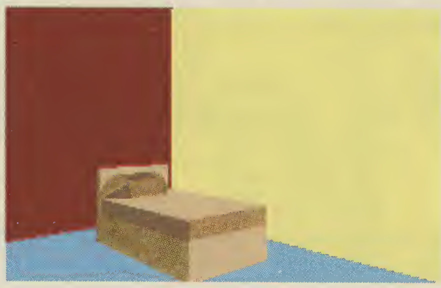
If you think you can beat Alastair's solution and come up with a faster route then drop us a line.



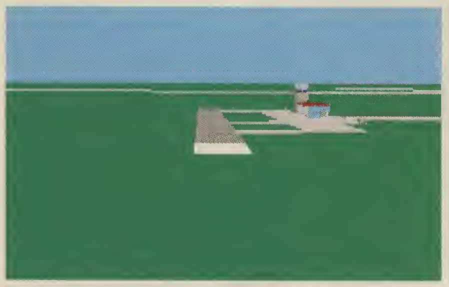
■ Get the spaceship as instructed then fly to Loc-ref 12:14 and get the A-Z computer.



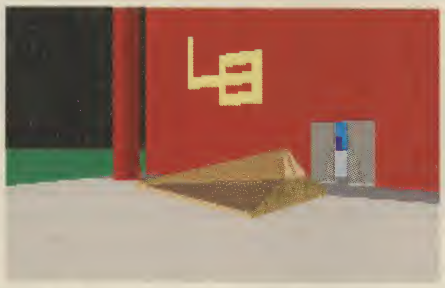
■ Fly to Loc-ref 15:03 and buy the pressure suit.



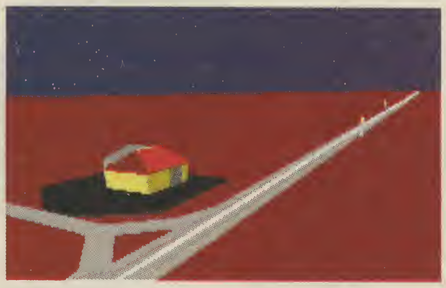
■ Fly to Snow Island and land at Loc-ref 3:00 and get the cupboard. It has a Nova trigger inside.



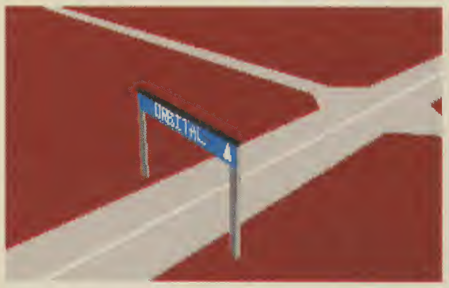
■ Fly to Bare Island and land at Loc-ref 6:02 and enter the transporter. Keep entering it until you get to Loc-ref 7:01 UR city on Gaea. Find the sideboard with a Nova trigger in it and return the way you came.



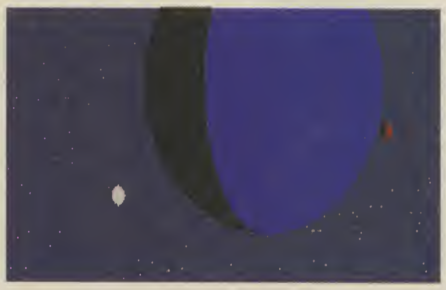
■ Fly to Metis and land at Loc-ref 5:06 and get the washbasin. To pick it up walk to the table that faces you when you enter. The wall behind the table moves because it is really a door. In the room you will find the washbasin. This has a nova trigger inside.



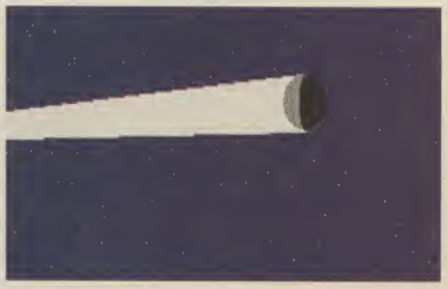
■ Fly to Chaldea Metropolis on Gaea and land at Loc-ref 6:06 and get the Gold from the basement. Next fly to Loc-ref 5:08 and sell the gold. Now fly to Loc-ref 5:06 and get the Hi-Fi system containing a Nova trigger.



■ Fly to UR City on Gaea and land at Loc-ref 9:02 and get the Nova bomb behind the lift in the basement.

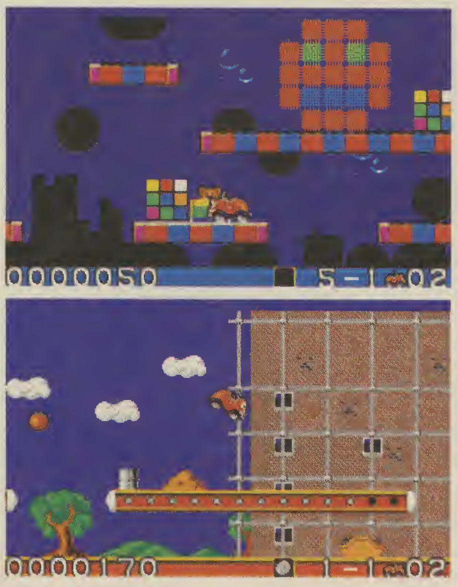


■ Fly to the planet Icarus and land anywhere. Leave the Nova bomb and fly a good distance away.



■ Switch on the Nova triggers one by one and watch the planet Icarus explode. Wait where you are for your rewards.The solution must be carried out within the first 90 minutes of play so don't go sightseeing.

NOT JUST ANOTHER CAR GAME



• *After Corporation, Core releases a cutesy game on wheels. If your driving techniques match those of the Dukes of Hazzard, you'll do wheelies over this one. It's addictively different.*

Last Christmas saw an explosion of car racing games. Getting in on the act a little late is Core Design with *Carvup*. Don't expect manic racing action though. *Carvup* is much more of a cutesy game than a your traditional foot-to-the-floor stuff. The idea is to zoom round the levels, leaping onto platforms and changing the colours of the steel girders supporting you. When you've driven over every platform a helicopter appears out of nowhere to carry you onto the next level.

It sounds an incredibly simple concept and it is. What makes it a hit, though, is the unusual control method of the car and some amusing graphics. The game is still a month away yet, but if the demos are anything to go by it's hugely absorbing and addictive.

DAMOCLES – THE NIGHTMARE CONTINUES

Judging by the huge quantity of *Damocles* tips that are constantly flooding in, everyone is totally hooked by it. For those of you who have completed the game several times over, Novagen is releasing the first of two mission disks. Mission disk 1 features five new missions set in the same environment as the original game. Apparently there are many elements to *Damocles* which many game players will never have seen; the new mission disks reveals some of these concealed features.

Mission disk 1 is set for release on 14 November, followed on 9 January by mission disk 2. Both will be available for the ST and Amiga, priced at £9.99.

Contact Novagen Software on 021-449 9516. ■

THE 16-BIT TOP TEN

For the week ending October 13

	Game Name	Publisher	Format
1	*F19 Stealth Fighter*	MICROPROSE	ST/ Ag /PC
2	*Kick Off 2*	ANCO	ST/Ag
3	*Tresure Island Dizzy*	CODEMASTERS	ST/Ag
4	*Targhan*	ACTION 16	ST/Ag/PC
5	*Italia 1990*	CODEMASTERS	ST/Ag
6	*Shadow Warriors*	OCEAN	ST/Ag
7	*Guardian Angel*	CODEMASTERS	ST/Ag
8	*Operation Stealth*	US GOLD	ST/Ag
9	*Yogi's Great Escape*	HITEC SOFTWARE	ST/Ag
10	*Shadow of the Beast*	PSYGNOSIS	ST/Ag

ST – ATARI ST Ag – COMMODORE AMIGA PC – IBM PC OR COMPATIBLE
Chart compiled by GALLUP. (c) European Leisure Software Publishers Association.

A NIGHTMARE OF A GAME REVIEW

VOODOO NIGHTMARE

PALACE • ST – £24.99 Amiga – £24.99

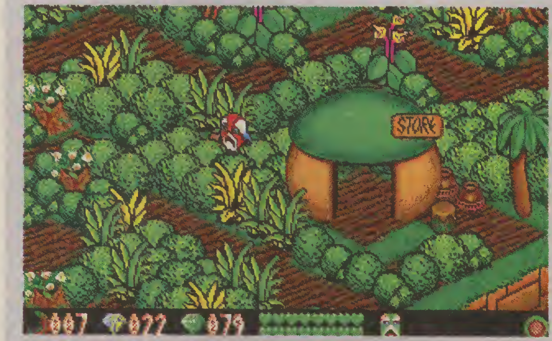
If there's one sure fire way to guarantee attention for your game, it's to come up with the kind of subject which is going to offend people and that's exactly what Palace has done with *Voodoo Nightmare* – a game all about the art of black magic.

The game puts you in charge of a hideous character going by the charismatic name of Boots Barker. Some unfriendly African witch doctor has locked his face up inside a death mask and he's now desperately trying to free himself. To lift the evil curse and release Boots, you need to collect eight pins then buy yourself an effigy of the witch doctor and proudly ram the pins home. Although the game is split into two distinctive sections, the main part of the challenge comes in locating these pins.

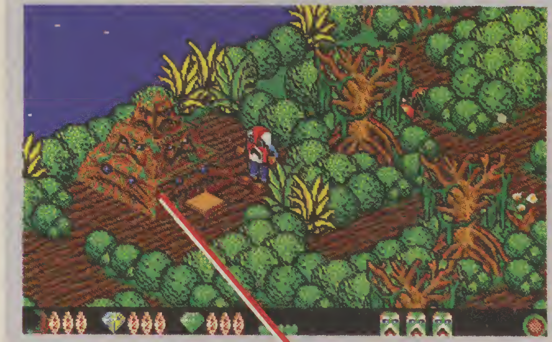
The game is set in the middle of a jungle, populated by monkeys, snakes and other jungle life. In between dodging this unhealthy bunch and collecting bananas which are used as currency in the jungle shops, you need to find temples which house the pins. There are five temples in all and they need to be tackled in the correct order. Once inside a temple you face a crowd of separate rooms all linked via small doors. Spiders and other offensive creatures follow you round the maze of rooms, attempting to trap you and rob your energy. By exploring each room and picking up the special gems located within each, you can gain the temple gods favour and he then rewards you with a pin and a special power of some kind. For example, the Snake God rewards you with an immunity from snake bites – imperative in reaching later temples.

Brilliantly detailed and colourful sprites and backdrops supplement this absorbing formula of arcade action and strategy. The passing of time in the game means that night and day either complicate or ease your task. *Voodoo Nightmare* is represented as a 3D isometric impression. This causes complications with the control of the hero and this is the only major complaint with the game. To correctly control Boots you need to hold the joystick at an angle, screw up and he'll go everywhere but the direction you intended.

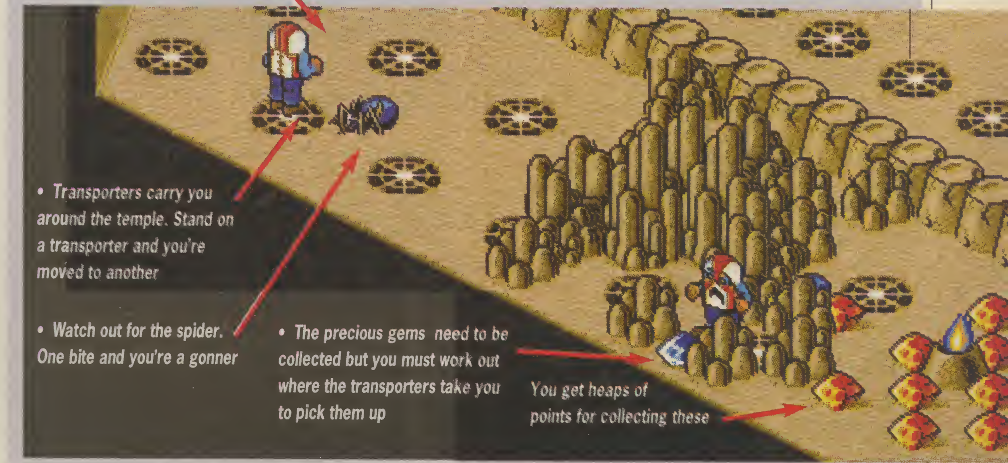
The scenario and style of the game is very unusual but this is *Voodoo Nightmare's* strength. If you're fed up of shoot-'em-ups and the myriad of arcade conversions due out for Christmas, *Voodoo Nightmare* could be just the break you're looking for.



• *Black Magic, an African death mask and a jungle infested by lethal animals – Voodoo Nightmare is unlike anything else you've seen. The objective is to find an effigy of the neighbourhood witchdoctor, collect eight pins and ram them into the doll. Sounds like good quality, wholesome entertainment to me!*



• *Climb inside the temple if you want to collect a pin from the temple god. Just because you've managed to work your way past fearsome jungle beasts to locate the temple, don't imagine the hard work is over. Once inside you have giant spiders, transporters and precious gems to watch out for.*



• *Transporters carry you around the temple. Stand on a transporter and you're moved to another*

• *Watch out for the spider. One bite and you're a gonner*

• *The precious gems need to be collected but you must work out where the transporters take you to pick them up*

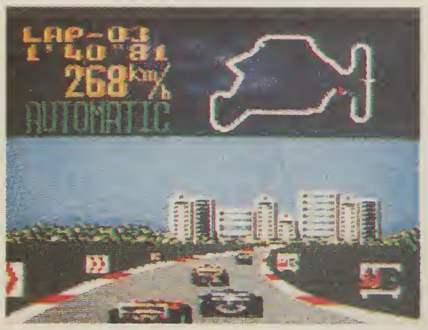
You get heaps of points for collecting these

THE CONSOLE ZONE

Your weekly guide to console gaming with Richard Frederick.

SEGA GAME GEAR

Super Monaco GP is one of the first releases on the new Sega Game Gear colour handheld console. This fast and furious racing-sim is packed with features including a choice of Grand Prix racetracks and a head-to-head simultaneous two-player link-up option. You can even customise your car with different engines and tires. *Super Monaco GP* costs 3500 yen (£14). The Game Gear is the latest handheld console to be released in Japan. It has a 3.2" (480x146 pixel display) colour screen which can display 16 colours on-screen out of a palette of 4096, four-channel stereo sound, optional TV tuner and costs 19800 yen (£79). Sega should release the sleek matt-black Game Gear in the UK early next year.



• Line up for action on the race track.

NEC PC ENGINE PLAYING TIP

If things are getting too easy in *GALAGA*: press [Up] and [Run] on the title screen for a tougher game.

GREAT GAMERS

Can you meet the Console Zone challenge? We're looking for the best video game players, and you're looking for fame. Send us your top scores on the latest games released on the Megadrive, Gameboy, NES, Game Gear, Sega Master, PC Engine, Lynx and Neo-Geo at: The Console Zone, New Computer Express, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW - or fax 0225 446019.

GAMEBOY

Batman	424.060	Peter Worth
QIX	199,908	Peter Worth
Super Mario Land	331,860	Alex Taylor
Tetris	396,064	Peter Worth

MEGADRIVE

DJ Boy	3,531,300	Alex Taylor
Eswat	277,900	Alex Taylor
Final Blow	2,525,040	Alex Taylor
Forgotten Worlds	653,900	Alex Taylor
Ghouls 'N' Ghosts	102,400	Alex Taylor
Golden Axe	414.5	Alex Taylor
Super Shinobi	1,968,500	Alex Taylor

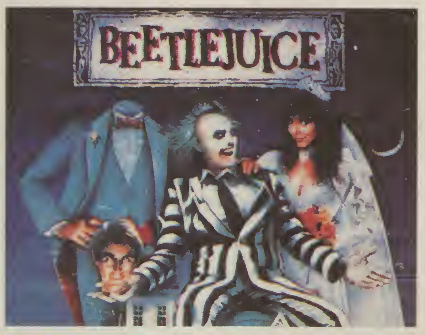
ZONE COMMENT

What do you think of the Nintendo NES and Atari Lynx adverts on TV? What are your favourite video games? Have you found any hidden features in your latest video game? Which computer games would you like converted to your console? We want your views connected with the current state of console gaming. Write without delay to the usual address.

NINTENDO ENTERTAINMENT SYSTEM

That crazy spook *Beetlejuice* is about to appear on the NES thanks to LJN. The ghost with the most is now haunting consoles, his own cartoon series and even a breakfast cereal. That's America for you! The game is based around the movie, with you having to rid your house of unwanted guests. By the way, apparently eight million viewers watch the Beetlejuice TV cartoon show every week.

PLAYING TIP
Get to the end of the game in *Code Name Viper* with this passcode: `217298`



• Spiritual experience takes over with Beetlejuice.

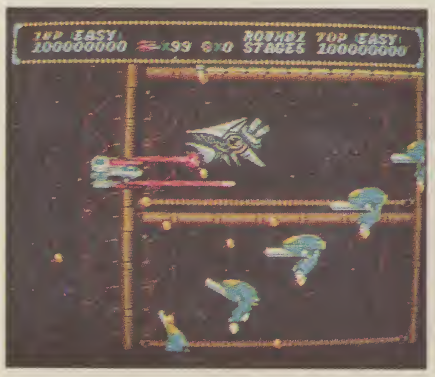
SEGA MASTER SYSTEM PLAYING TIP

For a few secondsof *Alien Syyndrome* invincibility, collect the mystery question mark when the countdown timer hits: 272, 267, 232, 222, 171, 161, 131 or 121

SEGA MEGADRIVE

Hellfire, from NCS/Taoplan, is the latest horizontally-scrolling shoot'em-up to hit the Sega. But will it topple *Thunderforce III* from the Number One position of best Mega blast? *Hellfire* is a 4 Megabit cartridge featuring 6 levels, 10 game-continue options, and 4 player-selectable weapons. It costs 6800 yen (£27).

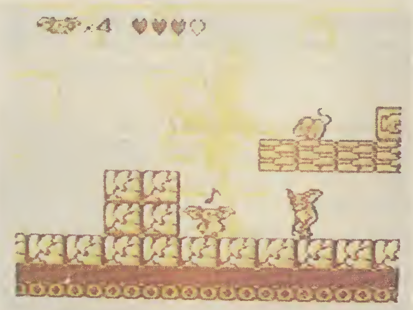
PLAYING TIP
Get 25 wins in *Herzog Zwei* with the passcode: JAJJBPDNCMC



• Hellfire *yet another shoot'em-up.*

NINTENDO GAMEBOY

Don't expose them to bright light. Don't get them wet. Don't feed them after midnight. Yes, those cute bundles of fur are back and causing even more trouble than before. *Gremlins 2* has been converted into a platform-orientated arcade adventure on the Gameboy (and NES) by Sunsoft - the company that brought us all\ those brilliant *Batman* games. Amazingly, the Gameboy version actually manages to look better than its NES cousin. *Gremlins 2* costs 3400 yen (£13) on Gameboy and 6500 yen (£26) on the NES.



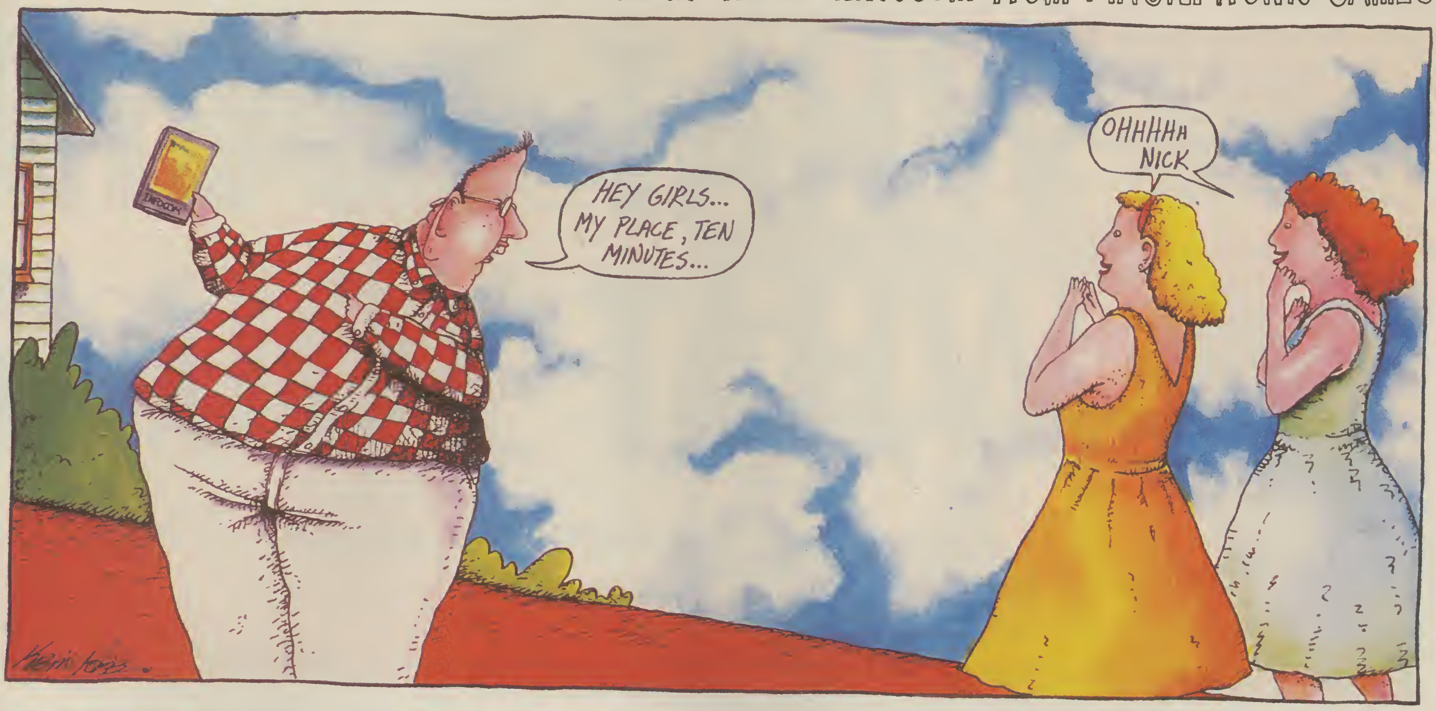
• Vicious little cuties. The Gremlins are back.

PLAYING TIP
Another *Teenage Mutant Ninja Turtles* tip courtesy of Damon Barwin from LM Software in Southend-on-Sea. Surely somebody else has a few Gameboy tips? Send them along to me at the usual address. Meanwhile: the first bonus game on the last level of the game can be found by jumping into the top left corner of the screen at the start of level five.

NINTENDO SUPER FAMICOM

Irem, the leading Japanese arcade game company, is about to release its popular coin-op *R-Type II* shoot'em-up onto Nintendo's new 16-bit console. This hot little slice of silicon looks really sexy on the Super Famicom - and remember it was the original *R-Type* that helped shoot the PC Engine to fame three years ago. If you liked *R-Type*, you'll love *R-Type II*. The Super Famicom console will be launched in Japan at the end of November, priced at just 25000 yen (£100).

Nick never got any chicks, until he bought those Infocom from Mastertronic games


INFOCOM
HEY GIRLS... MY PLACE, TEN MINUTES...
OHHHHA NICK

NOW THE ONLY LIMIT IS YOUR IMAGINATION

Classic Infocom Interactive fiction is back – at an irresistible price.

The Hitchhiker's Guide to the Galaxy
DON'T PANIC!

HITCHHIKERS GUIDE TO THE GALAXY -
You play the role of hapless Arthur Dent in this mind-bogglingly hilarious story by the best-selling author Douglas Adams. You'll chortle while your planet is demolished, yelp with laughter when threatened by the Ravenous Bugblatter Beast of Traal and split your sides as you search the galaxy for a decent cup of tea.

STELLAR PATROL: IT'S NOT JUST A JOB— IT'S AN ADVENTURE!
PLANETFALL

PLANETFALL -
In this sci-fi comedy, you're a stellar Patrol Ensign 7th class - as low as you can go. Then your luck takes a turn for the better. Your patrol ship explodes. True, the mysterious, deserted world to which you're jettisoned is plagued by floods, pestilence and a mutant Wild Kingdom, but you'll have Floyd, a mischievous robot, to help you find the secret to saving it.

LEATHER GODDESSES OF PHOBOS

LEATHER GODDESES OF PHOBOS -
You've been kidnapped by minions of the fiendish Leather Goddesses of Phobos who are plotting to turn the earth into their private pleasure palace. Succeed in escaping their clutches and you'll begin a naughty, bawdy and very amusing romp across the solar systerm. Your mission is to collect the materials you'll need to defeat the Leather Goddess and save humanity from their dastardly plan.

Your greatest challenge lies ahead–and downwards.
ZORK I

ZORK I -
This phenomenally popular story plunges you into the extraordinary environs of the Great Underground Empire in search of incomparable treasures. You'll come face to face with outlandish creatures as you make an amazing odyssey with so many twists it can offer new surprises every time you explore it.

Through strange, savage zones your way will be shown by the magical stone called
WISHBRINGER

WISHBRINGER -
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WHAT YOU S
WHAT YOU G

Mike Hardaker looks at Thinx, a database that uses pictures. Or is that a graphics program which manipulates data?

The proliferation of the graphical user interface (GUI) has resulted in many changes in the way we deal with computers. The old text-based, keyboard-oriented command line of MS-DOS, Unix and the mainframe tradition has been replaced by the windows, icons, pull-downs and mouse of the WIMP environment. The changing face of the microcomputer has led to many prettier versions of conventional computer programs, such as WYSIWYG (what you see is what you get) word processors and graphical spreadsheets like *Excel* and *Wingz*. However, it has not been seen as a spur to developing new software which would not be able to exist on the older, text-mode screens.

One exception to this trend has been desktop publishing (DTP). Without the Apple Macintosh's GUI, there would have been no *PageMaker* – and without *PageMaker*, the current rash of page-layout programs would almost certainly not exist. When it began, desktop publishing was a brand new type of application – it combined traditional disciplines of text processing and graphical manipulation, but the whole was definitely greater than the sum of its parts.

Thinx, from Bell Atlantic, is another exception to the rule. It is a brand new product in that it has only just been launched in the States (with UK distribution to follow) but it is also new in that it does things which no previous application has been able to do, thanks to the *Windows 3* GUI.

With *Thinx*, you can move graphical objects around the PC screen. Each object has an associated table of data and relationships between the different items of data are established as the objects are grouped together. Spreadsheet-like formulae can then be used to extract summary information.

ORGANISATION

For an example of how this might work, consider the standard tree-structured organisation chart: the MD at the top and the lines of reporting passing down through the executives, the middle-managers and so on.

With *Thinx*, you would draw up the organisation chart in the conventional way, but then you could then associate data with each employee's 'object' (typically a simple rectangle, although photographs could easily be scanned in and then imported to the program). For example, If this data included salary information it would be easy to set up formulae which showed the salary bill for each manager's team. Moving a sales executive from the northern sales team to the London area – by dragging the object into a different area of the screen – would then automatically change the salary bills for both the northern and London sales managers.

While this is handy for actual changes of personnel – providing instant management information in a visual form – its real strength comes from the ability to perform spreadsheet-like 'what if?' calculations. What will happen to the salary budget if three new sales staff are employed in the north? Adding three sales 'objects' to the appropriate place on the display provides an instant answer. Of course, this can be done using a spreadsheet, but in a far less intuitive way (thanks to the somewhat austere nature of a table of figures).

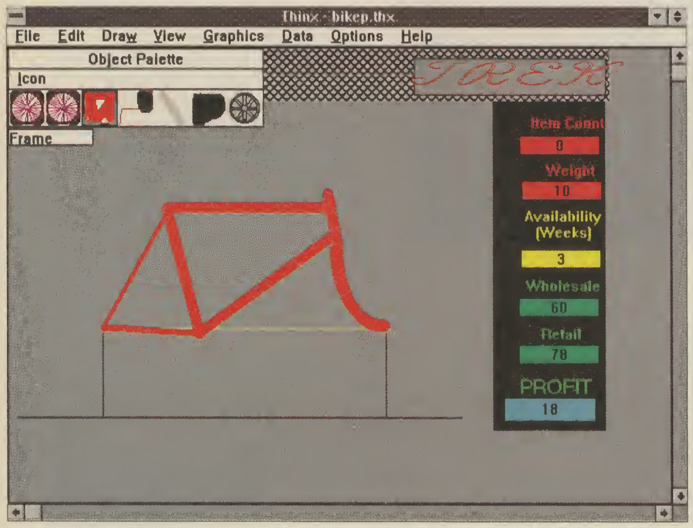
Furthermore, the personnel implications of any change can be seen straight away if *Thinx* is used: does the addition of the three extra people give the sales manager a team which is uncomfortably large? Is the office big enough to take three extra desks? Are there enough facilities in the building to satisfy health and safety regulations if the sales team goes up in size? Assuming the right data is associated with the objects, these questions can all be resolved at once.

IN USE

With a spreadsheet, it is possible to take a blank worksheet, bash in a few numbers and perform some simple calculations. *Thinx* doesn't have this ability – it is primarily a tool for developing applications which will then be used repeatedly.

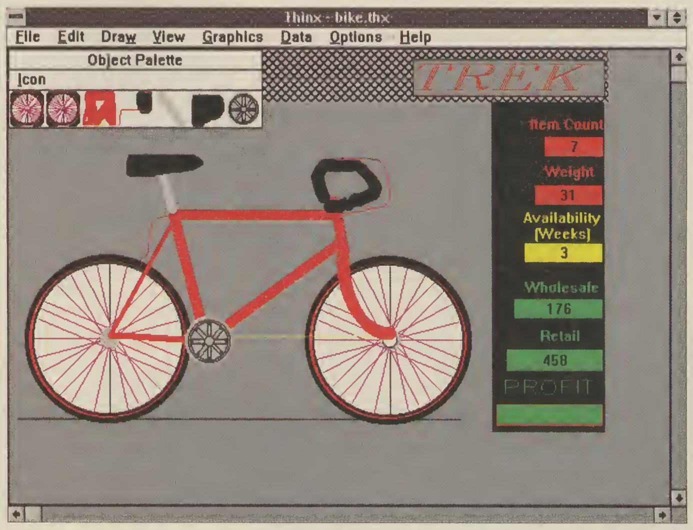
Building a *Thinx* application begins with designing the graphical objects. This involves using a *Micrografx Designer* like a set of drawing tools. As the program uses vector rather than raster (or bitmapped) graphics, the final results are infinitely scaleable, while retaining their original resolution – something which makes it easy to draw complex images at a large scale and then shrink them. Once the images are drawn, coloured and scaled, they are turned into objects, a process which involves taking the disparate, editable mass of lines and shapes which makes up a picture and turning them into a single, unchangeable item. These objects are then made into icons as part of an on-screen toolbook and by clicking on an item it is possible to duplicate objects on the display.

The next stage is associating data with each of the objects. The most straightforward way of doing this is to type the information in manually, using the data-entry forms provided. However, *Thinx* can also take *1-2-3, Excel* and



Item Count
0
Weight
10
Availability (Weeks)
3
Wholesale
60
Retail
78
PROFIT
18

• *The objects which make up a racing bike have been created, together with the data which defines such elements as the price and delivery time of each element. Here, only the frame has been added.*



Item Count
7
Weight
31
Availability (Weeks)
3
Wholesale
176
Retail
458
PROFIT

• *The complete bicycle has been 'built' and the total price, and delivery time of the latest item can be seen (together with such little items as the retailer's profit). Working out the cost visually makes it hard to forget such items as the saddle.*

E IS
ET

dBASE data directly, so if you already have the data in a spreadsheet or database the odds are you will be able to import it. As an added bonus, *Thinx* supports *Windows 3's DDE* (Dynamic Data Exchange) which allows 'hot links' to be established between an *Excel* spreadsheet – for example – and a *Thinx* database. So if the spreadsheet is updated *Thinx* changes (and vice versa).

Finally, formulae are written to establish the links between the different objects. Then all you have to do – to quote the program's packaging – is draw your own conclusions.

WHO NEEDS IT?

Thinx is useful for those who need to manipulate images and data and are currently using two or three programs to do so. A landscape architect, for example, will draw a garden plan with a drawing package and then list the plants in a spreadsheet in order to come up with a price quotation. Using *Thinx*, it is possible to combine the two processes, adding the ability to do 'what if?' work – will the project go over budget if a couple of cypresses are planted by the patio, and is there room for them? A magazine could draw out a 'flatplan' of an issue's pages, associating each editorial page with a data file including commissioning information, deadlines, artists' notes and so on, while the advertising department's sales team would have a similar flatplan but with total revenue and page-yield data visible.

Thinx also has its uses for people who would prefer to work with a visual rather than a text-based system. This can be easier to understand and also reduce errors. For example, a computer network manager could find it helpful to work primarily with a visual representation of the network. The data associated with the objects would then give the cost of the items, the delivery times and so on. By drawing the network it is easier to make sure that all the elements are ordered – including such easily forgettable items as cables – and the logical interdependencies can be seen at a glance (something none too easy with a spreadsheet).

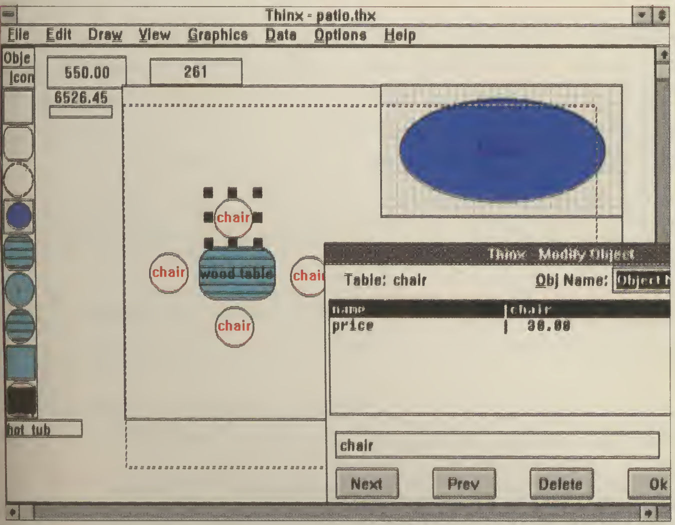
Thinx is the first of a new type of visual database, but it probably won't be the last. From the retired colonel who explains past military triumphs by shoving pepper-pots and crudites around the table, to the programmer who starts out with a flow-chart, many of us find it easier to understand relationships in a visual context. Modern microcomputers have the ability to combine the visual with the textual – but why has it taken the software houses so long to come up with a product to exploit that ability? ■

PRODUCT FACTS

Thinx is available from Bell Atlantic Corp and costs $495.
Contact 010 1 304-284 1370.

Technical support will be provided from the US until UK distribution is established.

The product requires a hard disk PC-AT (286-based or higher) with Windows 3.



550.00
261
6526.45

Table: chair

```
name                |chair
price               |  30.00
```

chair

• *Designing a patio with Thinx is a straightforward process - here some of the key elements have been added, with the total bill visible at the top left. The bottom right shows one of the data tables associated with an object – a chair in this instance.*

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Which game does NOT involve shooting aliens?
A) Xenon II
B) Outrun
C) Gemini Wing

2) Which of these is an adventure game?
A) Rick Dangerous
B) Atomix
C) Jinxter

3) Where does the word Amiga originate?
A) Huddersfield
B) Spain
C) Italy

4) Which of these is a software house?
A) Microprose
B) Microscope
C) Micromedia

5) How many bytes are there in 1 Kilobyte?
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B) 1128
C)1024

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TECH TIPS

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■ TAKE THAT! Bounder

You published my previous letter criticising your blinkered Amiga-loving responses to letters back in issue 99. Although I had not intended to, considering your subsequent response to this letter, I feel I have to answer, and hope you will once again publish my own opinions, in the assumption you do not consider your own point of view to be the only one to which your readers should be exposed.

Firstly, I would like to correct your rather strategic error in the reproduction of my letter, by replacing Amiga in the statement, "the ST is an excellent all-round machine with a higher quality of serious software." I trust this was an honest mistake.

Your comment that my "research is patchy" quoting the Amiga's oh so wonderful dedicated chip set, is a rather worrying claim. I take it you are aware of the purpose of these custom chips. They are graphics and sound orientated, things which, as my original article was stressing, are not relevant to a serious machine. Using your rather dubious logic, we should all go out and buy Nintendo Super FamiCom machines.

On the same page, you claim the Amiga to be a far superior DTP machine too because of a new Amiga-based publication. Well, the ST also is about to have a new magazine, called *ST Applications*, an evolutionary progression from the ST Club newsletter. And yes, it's produced on an ST! I have seen Amiga DTP packages and they are generally of a high quality. But so too are the ST counterparts, such as *Calamus*, *Timeworks*, *Pagestream* and *Fleet Street Publisher*. In my opinion, the opposite is true. The ST is a far more suitable machine.

I suggest that in future you try to give a rather more unbiased opinion. The standard response of "buy an Amiga" despite the application is rather a questionable one. I still consider the ST to be a better all round machine. The Amiga is prettier, but this isn't the same as more useful. If I only wanted games, I'd buy a console. If, however, I need a reliable, multi-purpose machine, then, for me, it has to be the ST.
Lee H Fuller, Canterbury.

I'm not the Amigaphile that you paint me and my challenge to the ST magazine DTPublishers of this world was taken up with gusto. As ever, I stand by what I said and still believe that the Amiga is a fine DTP machine. We are both entitled to an opinion, but the scales of proof are as you say, tipping toward the ST.

Many affronted readers of ST initiated news sheets, fanzines and magazines were quick to point out their fancies. The icing on the cake was a recent trip to the Soviet Union. A Polish journalist showed me a commercially produced computer magazine produced on STs using *Calamus*. The magazine (*Computer*) is produced in colour and there are both Polish and Russian language versions. Compared with UK magazines they look a little dull, but that is mainly due to the paper and print quality. The magazine shows that *Caiamus* is indeed a commercial quality DTP package.

• Watch *Express* for further news on life, computing and publishing in the Eastern Bloc.

■ HELP! Amiga Scart

Could you tell me how to do the following:

I'm using the Minigen Genlock with my Amiga 500. But I'm getting a poor signal on my TV. I would like to use it with my Philips 8832 Monitor, but it doesn't have a cubs socket.

Is it possible to wire up a SCART lead to do the same job? If so, how?
S Howard, Peace Haven, East Sussex.

We covered the Amiga SCART lead in full detail in Circuit City a few weeks back so you'll have to contact our back issues and subs department to get the full unexpurgated tale.Or you could take your A500 manual and look up the pin outs for the 23 pin video connector. Buy a SCART plug from Tandy (this has the pin out diagram on the packaging. Red to Red, Blue to Blue, Green to Green, Ground (Earth) to Ground and Sync to Sync. Add a modicum of patience, a blob of solder and a couple of hours cursing and the job is done.

■ HELP! NTSC sampler

In issue 98 of *NCE* the Amiga column contained news of a 16-bit sampler card, *Audiolink*, from Beta Unlimited.

As it is not yet available in the UK I was wondering if the American version would work on a British A500.
Mike Archer, Blackpool.

In theory, it's only the display and mains power that varies across the Atlantic. Programs designed for the US NTSC standard have only 525 lines instead of the more familiar 625 lines of the UK PAL standard. Many zillions of US programs happily run on UK machines with a shorter display on the screen. US peripherals are normally OK to run on UK machines. The problem generally only comes with power supply. In the US the mains voltage is a gentle and much safer 110/120V AC at 60 cycles. In the UK we use the turbo 240V AC at 50 cycles. Obviously any mains-driven peripheral or add-on will need to be transformed, but if you're going to invest a decent amount, check with the supplier that it will work with your kit.

A hurried promise from a supplier that they'll change it if it doesn't work will be small consolation if some incompatibility in the product has done a nasty to your machine. Be warned.

Back to your original question, we haven't had the 16-bit sampler in to review yet, so I cannot (and will not) speculate on its compatibility. As soon as it arrives we'll be going into Stock Aitken and Waterman mode and you'll get a full featured review of this whizzy product

■ HELP! Power points

I am using an Atari ST with monitor, printer and second disk drive. These are all connected to a four way extension cable. To save switching on and off the four items every time I come to use the computer, I leave them all switched on at the machines and just switch on/off at the mains plug. Is this likely to do any harm?
Robin Wadell, Peebles.

I know several people who subscribe to your 'one switch at the mains' policy of powering up and down. They all swear by it and proclaim loudly that they have been doing it for several hundred years since they were babes in arms without any problems.

To put it in perspective, if something is terribly bad at the mains, you are inviting 240 volts at 50 cycles to come and play repair bills with all four of your pieces of kit. Surely flicking four switches isn't too great a task? If machines were made to be switched on and off at the mains, there'd be no need to put a switch on them at all. This being the case, I'm sure the manufacturers would have made this saving before now. With every component costed to a tenth of a penny, if it was feasible to run without mains switches they would be extinct.

Let your finger do the walking and switch on all of your bits of kit individually.

■ OUCH! Still waiting

Having read you article on re-inking printer ribbons in issue 85 and your comments in reply to a complaint on your Tech Tips page in issue 93 I thought all the problems with WACCI would have been resolved.

Not so. I sent a cheque off dated 3 September and have not heard a word since. At least they have not cashed my cheque.

What is happening? If I ran my business on similar lines I would be on the dole by now. Does WACCI really exist? Perhaps there is a clue in the name. Please use your influence to promote some action.
Dave Cadman, Derby.

I eventually managed to speak to Steve at WACCI about the delays on orders. Rather than telephone him, I turned up in person to inspect the operation. WACCI is still working in fine order producing a monthly magazine and supplying the various twidgets and peripherals.

It seems that because I (and a couple of other journos) sung WACCIs

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COMING SOON!

In addition to the excellent software built-in to the Portfolio Free of Charge (see right), other software and peripheral products, such as the sophisticated Pocket Finance package and serial/centronics interfaces are available. And it doesn't stop there. Many manufacturers have recognised the potential of the Portfolio and have already started to design new peripherals and software. Products currently under development include: Serial interface with built in mini modem, Apple Macintosh interface, business, utility and programming software plus a range of adventure and battle strategy games. For further free details on the Portfolio range, fill in the coupon below and return it to Silica Systems now.

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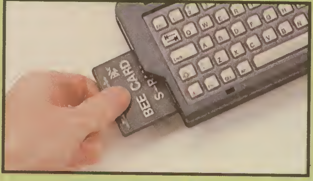
Portfolio has a complete address book facility that allows you to store hundreds of addresses and phone numbers. And, at the touch of a button, you can retrieve any one of them, or search for a specific grouping, such as "all Italian restaurants". And, when you are ready to book your table, hold your Portfolio to your telephone mouthpiece and use its special built-in tone dialler to dial the number for you.

TEXT PROCESSOR

The Portfolio's built-in text processor program includes word wrap, line and column count, string search, in fact most of the functions you would find in a word processor. It handles printer and word processor control codes and allows easy transfer of files between Portfolio and your desktop PC.

SPREADSHEET

For real calculating power, Portfolio has a Lotus 1-2-3 compatible spreadsheet built-in. It has 127 columns x 225 rows and reads/writes Lotus V1.0 and V2.01 files, so you can transfer data to and from Lotus 1-2-3 on your desktop PC. The Portfolio's 256K ROM includes MS-DOS and PC BIOS compatible systems software.



MEMORY CARDS

Portfolio can store and retrieve data and programs from its own RAM, or from small credit card size memory cards, that slot into its built-in card drive. The cards are available in three sizes, 32K, 64K and 128K, so you can carry a library of data in your pocket. The card drive also accepts ROM cards, which can contain commercial or custom software.

POWER SUPPLY

Portfolio is powered by three AA batteries which will run for up to six weeks with normal use, or from the mains using an adaptor. All the peripherals take their power from the Portfolio, so no extra batteries or adaptors are required. A 'battery-low' warning and memory back-up ensure that information is not lost when the batteries are changed.

INTERFACES & PERIPHERALS

Portfolio can communicate with other computers and supports a growing range of peripherals via a built-in 60 pin bus connector. Peripherals available include serial and parallel interfaces and memory expanders (to 640K). You can also add a card drive to your desktop PC, to enable it to read/write to Portfolio's cards.

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Before you decide when to buy your new Atari Portfolio, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Portfolio, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new Portfolio products? At Silica Systems, we ensure that you will have nothing to worry about. Silica Systems is a new division of Silica Shop, the UK's leading Atari specialists. This new division has been established to provide a service to the more serious home user, as well as to business and education purchasers. Silica have been established for over 12 years, and have an annual turnover of £13 million. With our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now, for our latest Free literature and begin to experience the "Silica Systems Service".

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praises at about the same time, we created a demand that outstripped capacity.

Everything at WACCI Towers is in order and is being dealt with chronologically. Plans are already underway to streamline the mail order operation. WACCI started as a CPC user group and would have remained a tidgy fanzine were it not for the efforts of founder Jeff Walker and current Oberlieutenant Steve Williams. In short it is a victim of its own success.

WACCI is on 081-898 1090.

■ HELP! BBC TV

I am intending to buy a BBC A3000 soon. What sort of monitor do you suggest I should get with it?

I would quite like one which could receive TV pictures on it, such as the Philips Model 2530 I have seen advertised. However, a friend has told me that as a monitor it has poor quality.

So is it possible to buy for a reasonable price a TV/monitor which does not sacrifice monitor quality? If so, which one would you suggest, or should I buy a dedicated monitor like the Cub3000?

Jeremy Benson, Bedford

I would suggest (or maybe even insist) the Cub 3000 from Microvitec. I reviewed this monitor for *Express* a couple of months ago and for the money it was the best A3000 display option available. Picture was on the high side of medium resolution and the build quality was almost military. A couple of qualms about the sighting of the controls were minor hassles and the quality of the monitor with its integral audio channel and speakers was fine. If you use a TV as a monitor, or for that matter a TV monitor you will be in the realms of compromise. The elegant solution is a TV modulator box (scan the ads for companies that do these).

This is a device that connects to a TV aerial and takes the RF modulated signal of a TV channel and turns it into the familiar RGB stuff used to drive monitors. You should check that it's compatible with your monitor before you connect it. This way you have a good display resolution and a crisp sharp picture of Des and Jane when you tune into ... Neighbours, Everybody needs good ...

■ HELP! C64 Host

I am hoping to start a BBS on my Commodore C64 some time next year, but first I need a RS232 interface with software and leads.

I have tried many computer shops in my area with no luck. I cannot afford to pay much more than £30.

Just in case no-one can help, could you give me any information on where I could get the RS232 interface and software.

I would also like to know whether Commodore do a hard drive for the C64. I know that the BBS software I have can handle two drives, but a hard drive can hold a lot more data. How much would a hard drive cost and from where can I get one?

S Morgans, Bexley.

You could give the chaps at Datel a ring. They seem to be able to run to ground just about every peripheral for every machine. Their catalogue of bitties is too big to reproduce on a Tech Tip page, but you could ring their Customer Technical line on 0782 744324 for more information.

If you want to chance your arm on a piece of previously used kit, you could do worse than to scan the Reader Ads in *Express* for the interface that you require. Alternatively you could place your own ad in the wanted section. Commodore don't currently do a hard drive for the C64. There may be third party drives available, but I have no information on their use and configuration.

Without knowing which BBs software you're planning on using, I wouldn't hazard a guess on whether it would work with a hard drive.

■ TIP! Icon Recovery

Even experienced users find the CLI heavy going and it's all too easy to type DELETE#? when you really meant DELETE RAM:#? or something similar. As the Amiga Workbench is supplied, non of these files are protected from deletion – this includes the dot-info files used to display icons in Workbench windows. It is possible to make these files read only and protect them from accidental deletion, but this prevents the 'Snapshot' feature from working (That's a tip in itself).

Assuming that you've made all the data work and all of the files read only, but left the dot-infos deletable (the best configuration under normal circumstances) accidentally typing DELETE #? removes all the . info files in one fell swoop. If this happens in the root directory, it prevents you opening any drawers from Workbench or running a Shell. On a hard disk system this spells major disaster. Here's a nice tip that should help beginners and experts alike.

While working in a CLI/Shell, keep the equivalent Workbench drawer open – and if you don't understand that you shouldn't be fiddling in the CLI (*back to the manuals ... Ed*). In the event that you accidentally delete all of the . info files all that you have to do is snaphot them all back again. This means shift clicking on each one in turn and when they're all selected, selecting Snapshot from the special menu.

It's vital to note that once you close the drawer, the icons stored in memory are lost until the disk/drawer is re-opened. This operation should be carried out immediately you realise your mistake. Also note that this technique won't recreate lost programs, only dot-info files. At least it will allow you to move through the directories.

Mark Smiddy, Redcar, Cleveland.

A useful Amiga tip from Amiga Specialist Mark Smiddy. Mark works as a freelance consultant and writer and even if he isn't prepared to blow his own trumpet, I'll do it for him. He can be contacted via Orion Computer services on 0642 482831 and is a source of wisdom, info and ideas for the Amiga.

■ HELP! WordPlus

I have just upgraded from an Amstrad 1640 to its 2086 machine in the office. Having swiftly confined its version of *Windows* to the dog kennel, I installed all my GEM software which runs perfectly, except *1st Word Plus* (vers. 1.12), which won't run at all, despite trying it under various different modes – MDA, Hercules etc.

I phoned Evesham Micros, who were unable to help. I also phoned GST Software who informed me they had sold the rights to Digital Research.

I would like to stick with *1st Word Plus* as I also have an Atari version at home, with obvious advantages, so please don't suggest *Protext* or *WordStar* version 17.5.

PS I am writing this letter using *EDLIN* on a Commodore Pet, so you can see how serious my problem is.

Paul Cheverton, Isle of Wight

As we've never seen a copy of the PC version of *First Word Plus* in the *Express* office, I took your question to *PC Plus* technical Supremo Steve Patient who suggests: "The version of GEM that you are running is probably configured for your old hardware. Upgrade GEM to a newer version fully compatible with your 2086 and your problem should be solved." What more can I add to that? (Nothing...Ed)

■ COMMENT! World problems

During a recent trip to the Soviet Union, one of the lucky few to own a PC tugged at my sleeve during a business meeting. There was a problem with his machine and he hoped that I could sort it out. The machine was of Russian manufacture and although it offered a familiar pattern of words on the screen, they were in Cyrillic script and unfathomable.

Offered the choice of shrugging shoulders and perhaps offending our hosts or attempting some magical multi-lingual cure, I opted for the latter.

Assuming that PCs the world over catch the same viruses, crash for the same reasom and have similar problems, I reckoned that the standard Tech Tips checklist might help. The computer in question was an EGA PC AT clone that had lost its SETUP (battery backed) and was refusing to acknowledge any drives other than the 360K 5.25-inch A drive.

There's a temptation to rush to the big box of diagnostic disks and steam through the machine with *Norton* and *PC Tools* at the first sign of a poorly PC.

These diagnostic remedies are fine, but to go through a complete set of them can take a lot of time and work. An interpreter translated my comment that it might be an idea to check the state of the batteries and all the connectors in the machine. By this time the tower box had been opened and several puzzled faces (including my own) were looking pensively at its caged innards.

They'd been expecting more. My almost simplistic suggestion would have been laughed at if I were a local, but as a guest, they were polite and even went as far as to check the connections ... and it worked. Smug relief for me, shock and surprise for them and the cementing of yet another East-West friendship.

Proof positive that it's so easy to over complicate a problem and that an ordered simplistic approach to troubleshooting can always reap dividends.

THE ATARI ABC

Now, there's a PC-AT compatible that not only solves problems like other AT compatibles, it also solves the one problem that its predecessors have created ... affordability.

Silica Systems are pleased to present the new Atari ABC. The ABC is a 286 AT compatible that runs at over 5 times the performance of the IBM XT. This is achieved by combining the power and speed of a 16-bit 286 processor, with Atari Corp's development experience and engineering capabilities, which use the very latest in design technology. However, the Atari ABC's are available at 'XT prices' and many XT owners will wonder why they paid more, but got less!

The ABC is a reliable, high performance computer, built to exceptionally rigorous standards. It is well designed, to a state of the art specification, maintaining maximum expansion capability for the future. This includes up to 4Mb of RAM and 3 AT expansion slots. Plus, unusually for a PC at this price, the ABC has the ability to install two or three extra drives, with the cabling already inside the CPU.

The ABC has a host of impressive features, all built-in as standard, encouraging simple installation and ease of use. In addition, the ABC's small footprint and quiet operating, mean that you will notice it less on your desk than other PC's. Except, of course, when you begin to take advantage of its AT power.

At its remarkably low price point, the ABC is ideally suited for home, office and educational use and will take full advantage of the vast range of PC compatible software. And, with 12 months FREE on-site maintenance (8 hour response), you can rest assured that your ABC will be fully supported.

The ABC is the latest addition to a comprehensive range of both 286 (8Mhz or 12Mhz) and 386 (16Mhz and 20Mhz) PC's, from the Business Systems Division of Atari Corp. Atari's PC range offers an unsurpassed combination of reliability, compatibility and expandability, with unique features like Atari's 44Mb removable hard disk on their PC4. Return the coupon NOW for further details of the complete range of PC products from Atari's Business Systems Division.

ABC TURBO
AVAILABLE: JUNE 90

To put the ABC even further ahead of the competition, we have introduced a special 'Turbo' version, which includes a super fast RLL hard disk controller to increase the data transfer rate from 150KBytes/s to 800KBytes/s, with a performance index of 4.801. Plus! to provide exceptional graphics with an outstanding colour resolution of up to 1024×768, we have included a Super VGA graphics adaptor and a 14" VGA colour monitor (which also supports 1024×768 resolution), all for an additional price of only £300. Check the ABC Turbo against the competition, at only £1299 (+VAT) with 30Mb hard disk, Super VGA colour graphics capabilities, plus 12 months on-site maintenance, it offers unbeatable value.

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- Fully OS/2 compatible (requires 4Mb RAM)
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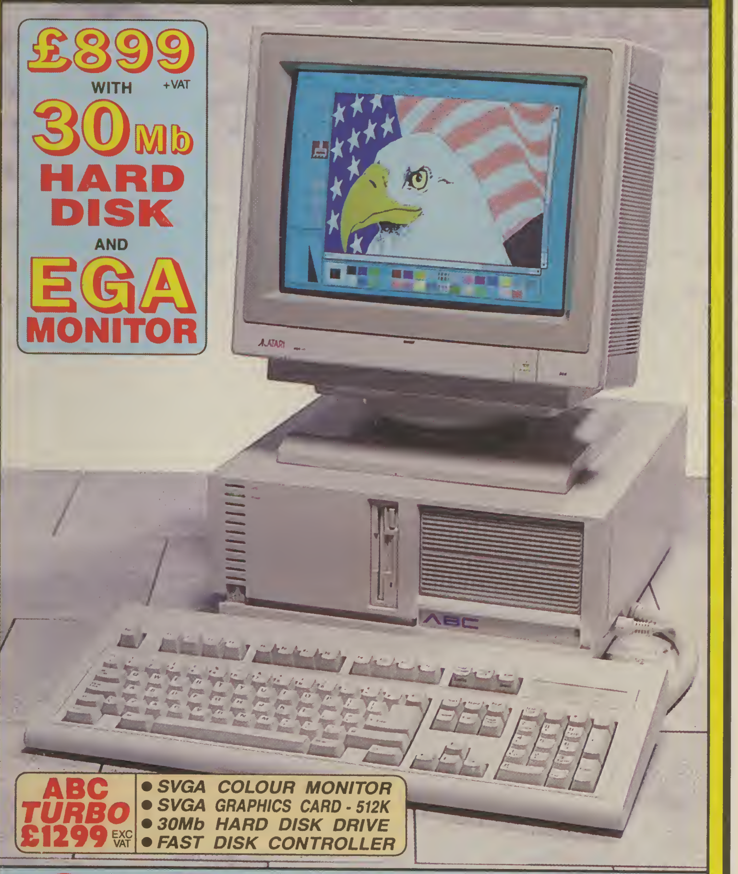

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WIN! WIN! WIN!

MONTHLY COMPETITION NCE

The *Express* monthly competition to win a £2,000 Panasonic laser printer rolls on. This is the last question on the list. Oh, and don't forget to send all four tokens in with your four answers.

QUESTION 4:

Which of the following is NOT a kind of printer?

A) 11-pin dot matrix
B) Laser
C) Inkjet

OOPS!

You may have noticed that in last week's issue we printed the same competition page as the week before. We just wanted to make sure that all our readers didn't miss out on the chance to win a £2,000 Panasonic laser printer.

So, once you've answered question four – the final question – send it and the answers to the previous three questions, along with your four competition tokens to The Monthly Competition, *Express* at the usual address. Entries to be received no later than Monday 12 November.

TEN COPIES OF DELUXEPAINT FOR THE ST AND AMIGA TO BE WON

£499.50 WORTH OF PRIZES!

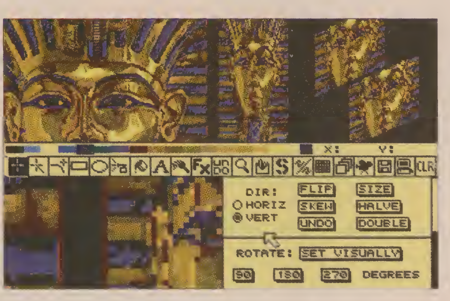
If you turn to page 74 of last week's issue you will see Jason Holborn's review of *DeluxePaint* (or *DPaint*) for the Atari ST. Jase told us the following about the program:

"Animation is a relatively new addition to *DPaint*, but it still manages to hit the competition for six."

" An absolute wealth of painting tools."

"Text control is superb."

These and other accolades are laid at the feet of the new graphics system. Of course Amiga owners have access to a similar system for a while now - although the programming team is different. So, with *Express* and Electronic Arts you get the chance to win a copy of this superb software suite. All you have to do is answer the following 5 questions, fill in the coupon below and send the whole lot off to us. Entries should arrive at the *Express* office no later than Monday 19 November 1990.



QUESTIONS:

1) Which painter cut his ear off?
   A) Vincent Price
   B) Vincent Van Gogh
   C) Vincent Van Hier

2) Which painter was famous for matchstick men style figures?
   A) LS Lowry
   B) TS Eliott
   C) LS Diary

3) Which artist was noted for his 'lack of height'?
   A) David Platt
   B) Toulouse Lautrec
   C) Joel Garner

4) Who painted Guernica?
   A) Pablo Casals
   B) Jim Morrison
   C) Pablo Picasso

5) Who was known for his 'action painting'?
   A) Michael Jackson
   B) Jackson Pollock
   C) William de Kooning

NAME...

ADDRESS...

The answers are: 1) 2) 3) 4) 5)

Supplementary question for the mystery prize...

Artifical Intelligence can never work because...
.... (No more than 5 words).

THE WINNERS OF THE DRAGONFLIGHT

Adam Wright, Thorplands, Northants; B Hobson, Huddersfield, W Yorkshire; Bill Brand, Perth; CJ Phelps, Brockworth, Glos; David Dennis, Ossett, W Yorkshire; Graham Persson, Livingston, W Lothian; J Wheeler, Biggleswade, Beds; Jason Brome, Canvey Island, Essex; K Crabbe, Bath, Avon; K Joyce, Sheffield, S Yorkshire; Mark Hopwood, Blacon, Cheshire; Miss E M Dron, Sutton, Surrey; Mrs PC Spencer, Spofforth, Harrogate; P Childs, Nuneaton, Warwicks; P Magee, Warlingham, Surrey; Scott Keir, Forres, Moray; Simon Lacey, Aylesbury, Bucks; Steve Lee, Ramsey, Cambs; Steve Sharples, Bingley, W Yorkshire; Vienna O'Hara, Bradford, W Yorkshire. Well done to each and everyone of you.

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£399 INC VAT

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TENGEN
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A500 BATMAN PACK

Commodore
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BATMAN PACK
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The Commodore A500 Batman Pack must surely rank as one of the most popular computer packs ever! The pack features the **Commodore Amiga 500 computer** with **mouse controller** and **TV modulator**, plus four top software titles. The software includes: **'Batman The Movie'** - Rid Gotham City of the cunning joker, in Ocean's top selling title based on the blockbuster Batman film; **New Zealand Story** - high quality conversion of the leading arcade game; **Interceptor** - Dogfight with two F-16's in this leading flight simulator; **Deluxe Paint II** - top quality Amiga graphics package which set the standard for others to follow. Return the coupon for further details.

PACK INCLUDES:

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New Zealand Story	£24.95
Interceptor	£24.95
Deluxe Paint II	£49.95
TOTAL RRP:	£549.78
Less Pack Saving:	£150.78
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For the more serious or professional applications user, Commodore have a selection of systems based around the expandable Amiga 2000, at prices from £1295+VAT. The A2000 features a full 1Mb RAM (expandable to 9Mb), 9 system expansion slots, plus IBM compatibility with the use of PC-XT or PC-AT bridgeboards. Complete and return the coupon, putting a tick in the A2000 box, for details of A2000 computer systems.

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FLIGHT OF FANTASY

Flight of Fantasy is the very latest Amiga 500 pack from Commodore, featuring BRAND NEW software releases, to make this the most spectacular A500 pack ever! The pack features the Amiga 500 computer with mouse controller and TV modulator, as well as four top software titles. These include the following:

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Here's something completely different - a science fiction story with comic book style graphics. Our heroes Jake and Duke are on the Planet X rescuing Humans who have been captured by the Robot Monsters and forced to create an evil Robot Army to DESTROY EARTH! Jake and Duke fight their way through hordes of evil Robots to help the Humans escape.

RAINBOW ISLANDS:

Slip on your magic shoes, practise throwing a rainbow and you're ready to go island hopping. From the Island of Doh to Monster Island, you will encounter Doh himself, stinging insects, lethal combat machines, mechanical assailants, the formidable beings of legend and folklore. Finally enter the world of darkness and its inhabitants.

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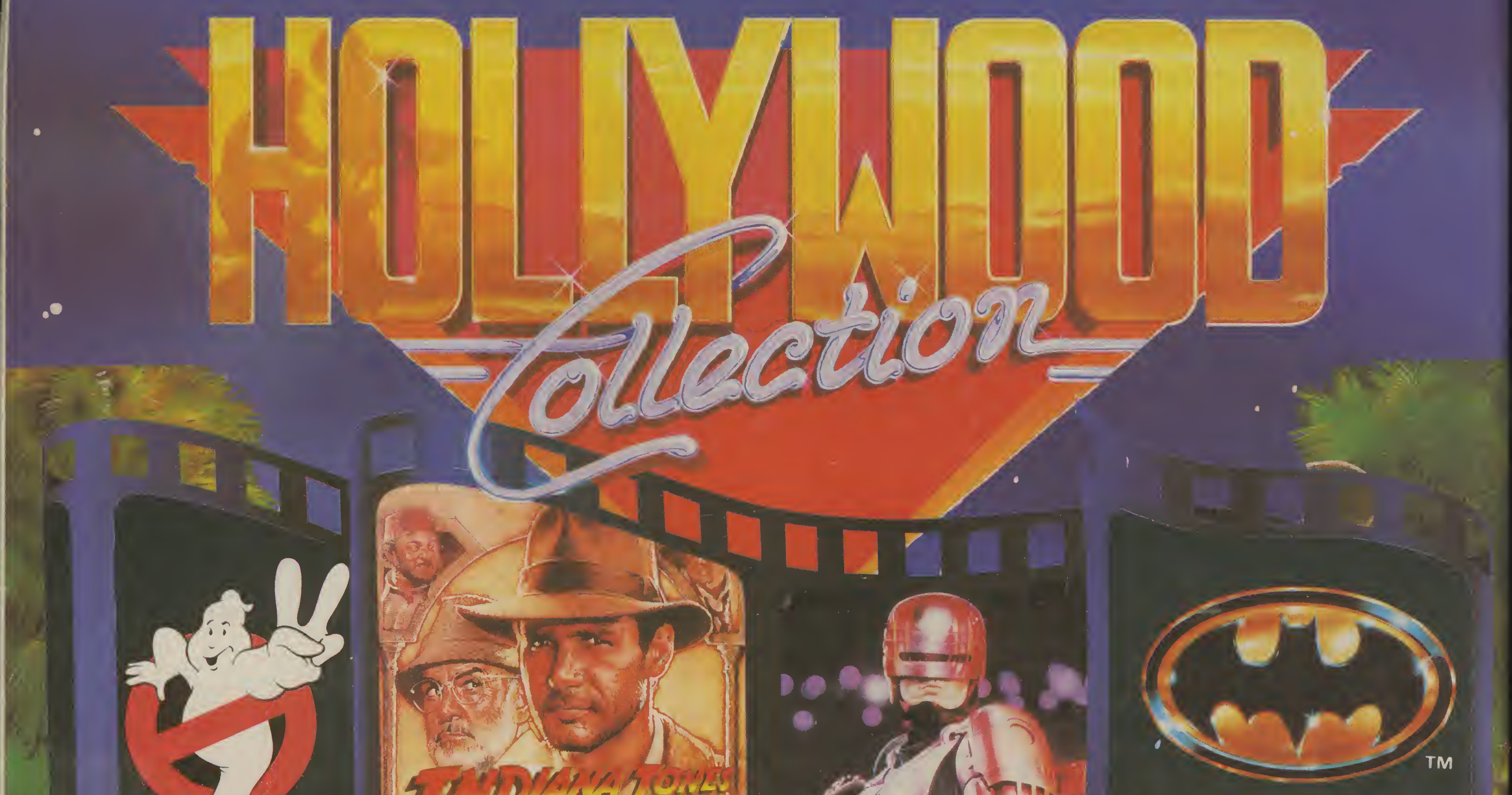
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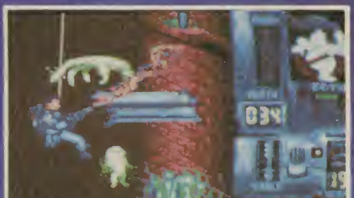

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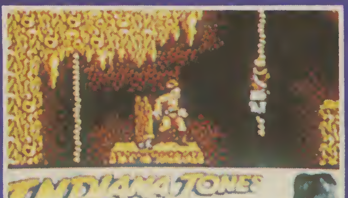
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